

VIRGINIA ISSUES

**Reforming
the
Individual
Income Tax**

by

John H. Bowman

Virginia Commonwealth University



WELDON COOPER
CENTER FOR PUBLIC SERVICE

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FOREWORD

Starting in the late 1970s the Tayloe Murphy Institute, which was one of two institutions that combined to form the Weldon Cooper Center for Public Service in 1987, published a series of monographs on fiscal issues in the Commonwealth of Virginia. Six papers were eventually published. In the mid-1980s the series was discontinued. Many topics had been covered and did not require immediate reexamination, and both the Revenue Resources and Economic Study Commission and the Virginia Department of Taxation were performing similar analysis. Today, many of Virginia's fiscal issues need a fresh review, but the commission no longer exists and the Department of Taxation does not publish an analysis series. This paper marks the resumption of the Virginia Issues series.

I am very pleased that John H. Bowman, Ph.D., Professor of Economics at Virginia Commonwealth University, agreed to author the first issue of the new series. John received his Ph.D. from Ohio State University. His research interests include state and local revenue structures, intergovernmental fiscal relations, the changing nature of property taxation, and property tax variants and prospects in South Africa. Prior to his academic career, he served as head of a tax policy unit in

the Ohio Department of Taxation during the early 1970s when Ohio adopted a state income tax. He has consulted on tax studies in several states and the District of Columbia. In 2000 John conducted research on the Virginia individual income tax for the Commission to Study Virginia's State and Local Tax Structure for the 21st Century. His work for that commission provided a foundation for the much more detailed treatment of the income tax that is provided in this monograph.

This study was edited with the strong assistance of research assistant Allison E. Wiley, who also developed the glossary and compiled the index. Also from the Cooper Center, research specialist Stephen C. Kulp converted the document into a publication format, research assistant Julie Arehart aided in the formatting of tables and figures, and research assistants Catherine E. Barchers and Megan C. Moyer did proofreading. Graphic designer David J. Borszich designed the cover and graphic designer Susan Wormington assisted with the publication software and provided the graphics. Edward P. Harper, former Senior Economist in the Fiscal Research Office of the Virginia Department of Taxation, performed the revenue impact simulations for the alternatives proposed by Professor Bowman.

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EXECUTIVE SUMMARY

The Virginia individual income tax is the source of over half of all state taxes and an even larger share of general fund taxes. This major tax needs significant revision. Change is necessary to provide greater equity among Virginians, to provide increased simplicity for both taxpayers and administrators, and to minimize adverse economic effects.

This monograph reviews the history of the Virginia income tax, evaluates it against standard criteria for a good tax, compares selected features of the Virginia tax to other states' income taxes, and makes recommendations for changes to improve the tax. Problems with the tax could be addressed in a variety of ways, and one section sets forth several alternative income tax structures to illustrate the range of possibilities. These alternatives range from a single-rate tax to one with more tax brackets and more steeply graduated rates than in the current tax. All these alternative structures were designed to yield the same revenue as the current tax. The Virginia Department of Taxation provided simulations using computerized information from the 1998 returns, the most recent available at the time the simulations were performed. Imposing this requirement of revenue neutrality does not mean that the yield of the current tax is ideal; rather, holding constant the revenue yield for the various alternative structures provides a sharper focus on the other policy issues. The monograph then discusses appropriate changes to alter the revenue level, should policy makers so desire. A glossary is provided at the end of the monograph for the convenience of the reader.

PROBLEMS

Equity of the income tax has diminished as a result of many years of piecemeal alterations in response to various pressures, while leaving key features of the tax unchanged in the face of changed circumstances. The lack of adequate revision in the structure also has added to the increased dominance of the income tax in the state's revenue system. Personal exemptions and standard deductions have remained low relative to poverty

level income and relative to their levels in the federal income tax. Failure to adjust these subtractions from the tax base uses inflation as a back door means to increase revenue. From the taxpayers' perspective, the lack of adjustment imposes higher real tax burdens by leaving an increasing share of poverty income in the tax base. The recently adopted credit for low-income individuals addresses the consequences of this effectively enough for most Virginians below federal poverty guidelines, leaving them with no income tax liability, but the credit ends abruptly when income rises above poverty. Very large increases in tax liability result from very small increases in income at the poverty line; in essence, the working of this credit taxes people who have managed to rise a bit above poverty back into poverty. Roughly half of poverty level income now is in the Virginia income tax base for most households.

In addition to this *vertical inequity*, the Virginia income tax also treats households with the same amount of income quite differently, creating *horizontal inequity*. Households of the same size and with the same amount of income often owe vastly different amounts of tax. The most significant instance of such horizontal inequity is the disparate treatments of elderly and non-elderly persons. Virginia allows each person age 62-64 to subtract \$6,000 of otherwise taxable income in calculating tax liabilities. For those 65 and over, this is doubled to \$12,000 per person, and an additional \$800 personal exemption is granted, as well. The result is that an elderly couple, ages 65 or over, that takes the standard deduction can disregard \$32,200 of otherwise taxable income, compared to only \$6,600 for a couple under age 62. These amounts are, respectively, 303 percent and 62 percent of the 1998 poverty income for a two-person household. In short, age is the excuse for allowing nearly five times as much tax-free income for the elderly compared to the non-elderly. Large as this disparity is, it understates the situation because most elderly persons have Social Security benefits, none of which are taxable under the Virginia tax (even though a portion of such benefits is taxable under federal law), and the exclusion of Social Security is not reflected in the figures used here. While the age-based preferenc-

es are the major source of horizontal inequity, there are many others, including exclusion of a portion of military pay for some members of the armed forces. The rationale for the income tax is ability to pay, but this principle is violated by introducing source of income, age of recipient, and other such considerations into the equation.

It is important to stress that one person's tax break creates a penalty for others. Tax preferences of the sort just noted narrow the tax base. This means either less revenue and, consequently, a lower level of services, or a higher tax rate. For any given revenue yield, higher taxes have to be imposed on others.

Some of the provisions cited above, and others as well, reduce the *simplicity* of the tax. In 1972 the commonwealth moved toward conforming key provisions of the state income tax to the federal tax. Federal adjusted gross income (AGI) became the starting point for the state tax. A further source of conformity is the provision that Virginians' choice between itemized and standard deductions must be the same for their state returns as for their federal returns, even though the Virginia standard deduction amounts are substantially less than those in the federal tax. State itemized deductions generally are the same as federal (except for deductibility of the state income tax). This makes filing simpler for the taxpayers and also makes federal tax information quite useful in administering the state tax, thereby simplifying administration. However, some provisions of the Virginia tax, such as failure to tax Social Security benefits to the same extent as the federal government, necessitate adjustments of federal amounts for state purposes.

Virginia never fully conformed personal exemption and standard deduction amounts to those for the federal tax, but it has come closer with standard deductions than with personal exemptions. Following the federal Tax Reform Act of 1986, Virginia set its standard deduction amounts (\$3,000 for single filers, \$5,000 for married couples) at the levels in the 1986 federal law, but set personal exemptions at just \$800 compared to \$2,000 in the federal law. Since then, the Virginia amounts have fallen far below those for the federal tax because the federal amounts are indexed, increasing each year in step with inflation, whereas Virginia does not index. For tax year 2001, the Virginia standard deductions remained at \$3,000 and \$5,000, compared to \$4,550 and \$7,800 for the federal tax, and personal exemptions remained at \$800, compared to \$2,900 for the federal tax. Failure to index is a major reason Vir-

ginia leaves a very large percentage of poverty level income in the tax base for the non-elderly. The federal tax also indexes the widths of the various rate brackets, while Virginia does not. This is necessary to keep inflation from producing "bracket creep" and pushing up taxes relative to inflation-adjusted income.

ALTERNATIVE TAX STRUCTURES

The alternative tax structures identified in the monograph start from a common base. That base removes the age-based preferences discussed above while increasing 1998 (the base year for revenue neutrality) personal exemptions to \$2,500 (or using an equivalent credit) and standard deductions to \$3,500 (single) and \$7,000 (married). This combination of personal exemptions and standard deductions was set to provide tax-free amounts that remove poverty level income from the tax base for all households. That objective could not be fully realized while staying with a relatively simple set of exemptions and deductions, however, because federal poverty levels do not rise in proportion to household size. Further, the standard deduction for a married couple was set at exactly twice that for a single person to avoid this aspect of the marriage penalty. This is consistent with Virginia's aversion to a marriage penalty, evidenced by its historic combined filing option for married couples, so that one spouse's income was not effectively added on top of the other's, and the more recent spouse tax adjustment designed to give the same result as separate filing. A further constraint was the desire to keep the tax-free amount for any household size from rising too far above the poverty level. As a result of these circumstances, the tax-free amounts remove less than 1998 poverty income for single people (72 percent) and more for two-person households (113 percent), but come very close to poverty levels for other household sizes. The amount would need to be increased in line with inflation since 1998 to achieve this result at a later date.

If reforms of the type recommended in this study are adopted, low-income taxpayers generally will pay lower taxes and high-income taxpayers will pay higher taxes. It is important to note that the elimination of tax preferences will not necessarily increase the tax bills of those with very low incomes because of the offsetting effects of broader brackets, higher exemptions or credits, and a higher standard deduction. In addition, the many high-income taxpayers who itemize deductions will obtain significant tax relief by claiming their higher

state income taxes as expenses on their federal returns. Furthermore, taxpayers who itemize deductions will lower the effective rates (calculated as tax liability as a percentage of AGI) exhibited in this monograph.

Seven different rate structures differentiate the alternatives. At one extreme is a single-rate tax; a rate of 5.3 percent was determined to be required for revenue neutrality. It should be kept in mind that the larger tax-free amounts provide an offset to the effect of eliminating the lower marginal rates. A second option has rates of 5 percent and 6 percent, with the break between the two at \$50,000 of taxable income. At the other extreme is a structure with five brackets; each of the first four brackets is \$20,000 wide, so that the top marginal rate starts at \$80,000. The marginal rates that produced revenue neutrality are 3 percent, 5 percent, 6.5 percent, 8 percent, and 9.5 percent. Thus, a wide range of rate structures can produce revenue neutrality. The last of the options differs most from the current tax structure in terms of the distribution of tax burdens, because it is more steeply graduated.

It is important to stress that a single-rate tax, coupled with realistic tax-free amounts such as those used in the simulations, produces a progressive pattern of effective tax rates. Households with incomes at or below the tax-free levels have zero liability and thus a zero effective tax rate. As income rises, however, the tax-free amounts become smaller and smaller relative to income, so the effective tax rates rise with income, and at high income levels approach the statutory rate. Thus, rate graduation is not necessary if the objective is a moderate degree of progressivity. An advantage of the single-rate tax not possessed by the other structures is that it does not discriminate either between single and married persons or between married couples with one earner and those with two earners.

RECOMMENDATIONS

The Virginia individual income tax needs comprehensive revision, to make it fairer for all Virginians and to meet other principles of a good tax. An infinite number of rate structures could be identified to produce whatever amount of revenue the state wishes to gain from this tax. If the state opts to stay with a graduated-rate tax, it should expand the widths of the brackets to

make the graduation more meaningful. The current tax has not kept pace with rising income levels and costs of living, and rate graduation tops out at the relatively low level of \$17,000 of taxable income. The steeper the degree of rate graduation, the greater the shifts in tax burdens among different groups of taxpayers, compared to the current tax. Also, steeper rate graduation presents trade-offs between vertical equity and other criteria. High marginal rates tend to produce adverse incentives that work against economic development and growth. Moreover, administrative and compliance complexity may be increased.

Whatever rate structure is adopted, certain tax base changes are needed. Two principal changes are called for. One is an end to age-based preferences and other preferences based on source of income or characteristics of the income recipients; these diminish revenue adequacy for any given rate structure, and sometimes create striking horizontal inequities. The second change involves setting the tax-free amounts so as to remove poverty level income from the tax base to the maximum extent consistent with other objectives. The current low-income credit is ineffective once income rises above the poverty level, and large tax increases result at this level. If further relief at low levels of income is desired, an earned-income credit patterned after the federal credit is preferable to the current Virginia credit.

Once the basic changes have been adopted, the key elements of the structure should be indexed. At a minimum, this means increasing the standard deductions and personal exemptions in line with inflation. For added simplicity, these might be set at the same level as those for the federal tax, picking up the federal indexing. However, this would retain an aspect of the marriage penalty, since the federal personal exemption for married couples is less than twice that for single filers. If two or more rate brackets are defined, the bracket widths also should be indexed. Additionally, if the state wishes to produce more revenue from the income tax, the revenue enhancements should be accomplished in ways consistent with the logic of the structure adopted. If a single-rate tax is adopted, for example, the temptation to graft an additional bracket onto it should be resisted. To address revenue shortfalls expected to be of relatively short duration (up to a few years), the most appropriate approach would be a tax surcharge. Similarly, yield could be reduced by a uniform percentage decrease in all taxpayers' liabilities.

INTRODUCTION

The Virginia individual income tax needs reform. The tax is the largest single source of Virginia state tax revenue and it accounts for a major share of general fund tax revenue. Despite its importance, the current tax is the result of many years of only piecemeal legislative changes. These changes have occurred in response to developments in the federal individual income tax, court decisions, and political pressures. Equally important, however, has been the failure to make other changes warranted by new circumstances. By reforming the individual income tax, Virginia could correct a number of problems and modernize this important source of revenue.

Political leaders have often stated that the Virginia tax system needs to be restructured for the 21st century. In the late 1990s the General Assembly created the Commission on Virginia's State and Local Tax Structure for the 21st Century, a citizens' commission chaired by Thomas R. Morris, a political scientist who is president of Emory and Henry College. The individual income tax figured prominently in the deliberations of the "Morris Commission," and its report, issued in early 2001, includes a number of unanimous recommendations that would produce a fundamental restructuring of the tax. While this study builds upon work the author did for that study, and the conclusions and suggestions here are consistent with the recommendations made by the Morris Commission, this monograph is not intended to promote the specific recommendations of that commission; indeed, there are some differences between its recommendations and those made here. The commission's report and this monograph have in common the belief that the current tax is badly in need of revision, and that the revisions should be guided by the logic of a set of tax criteria rather than being made piecemeal, as in the past. A comprehensive, unified package of reforms is needed.

To that end, this study provides a systematic look at the Virginia individual income tax and the key issues it presents to help Virginians, including state policymakers, make informed choices about income tax reform. The subject is complex, in part because of the many tax

code provisions to be considered. Another complication is that there is, unavoidably, a specialized vocabulary used in dealing with these matters. In addition, several principles are used to evaluate those provisions and possible alternatives, and in some instances satisfying one principle must come at the expense of satisfying another one. Despite the complexities, however, it is important that Virginians have a better understanding of their major tax source and the issues it presents. The reader is commended for delving into this challenging topic. Several features of this monograph seek to make the task as easy as possible.

- A detailed table of contents, including a list of tables and figures, and an index enable the reader to find specific items within the overall monograph.
- An executive summary gives the reader a brief overview of highlights of the study.
- Use of technical jargon is kept to a minimum.
- Numerous tables and several graphs are used to present information in ways that can be followed more easily than through sole reliance on prose.
- Page footnotes are used, rather than endnotes at the end of the report, so that the reader can more readily access the information.
- A glossary is provided to assist in the understanding of the necessary specialized vocabulary.

The section following this introduction discusses the history and development of the state individual income tax through the 20th Century. The evolution of the Virginia tax's major provisions is traced from their early-20th Century roots, and the tax as it now exists is viewed against the backdrop of major national trends in state income taxes over the last two decades.

The third section provides a review of the standards for a good tax, including two dimensions of equity; simplicity of administration and compliance; and the

avoidance of adverse incentives. Each standard, or principle, is discussed in a separate subsection. Each subsection considers how the Virginia income tax compares to a given principle and to practice in other states, and then presents recommendations to conform the Virginia tax to that principle. Likely trade-offs among principles are noted.

The fourth section outlines several policy alternatives derived from the discussion in the previous sections. Specifically, a comprehensive, integrated package of changes to the tax base is recommended, reflecting the principles in the third section, and several alternative rate structures then are applied to the reformed base. All of the alternatives are revenue neutral, meaning that each would generate about the same amount of revenue as the current tax. To assure this, revenue simulations were provided by the Department of Taxation based on 1998 tax returns, so revenue neutrality maintains the 1998 yield when alternative provisions are applied to the 1998 tax base information. It is important to stress that revenue neutrality was adopted as an analytic device to focus attention on the policy choices presented by the alternative structures separate from the question of the amount of revenue to be generated by the tax.

Whatever amount of revenue is to be raised, it is important that a sound tax structure be put in place for that purpose; whether income tax revenue should be held constant, increased, or decreased is purely a political choice. Included in the last section of this study is a discussion of some alternatives for increasing tax yield. Additional revenues from the income tax might be desired as part of an overall restructuring of the state-local tax system to reduce reliance on other taxes that do not rate as well on the tax principles. Alternatively, in a tight fiscal climate, such as that confronted in the opening years of the 21st Century, some might wish to seek a net increase in revenue.

New information pertinent to various aspects of this study constantly is becoming available. As a result, anything based on materials available at a given time will be somewhat outdated a short time later. It is necessary in preparing a study such as this, however, at some point to stop revising and to publish. Materials cited in this study were current at the time the monograph was being prepared, but newer editions of some periodic reports have since become available. Two recent reports on comparative state income tax treatment of low-income households are included in the bibliography, although they were not available in time for incorporation into the body of the monograph.

HISTORY AND IMPORTANCE OF THE INCOME TAX

VIRGINIA'S INDIVIDUAL INCOME TAX TODAY

Federal data show Virginia near the top among state governments in reliance upon the individual income tax as a source of tax revenue.¹ In fiscal year (FY) 2000, Virginia obtained 54 percent of all state government taxes from this source, 1.5 times the national average of 36 percent. Only four other states obtained more than half their tax dollars from the individual income tax. Further, Virginia ranked tenth among the states in the share of combined state and local taxes contributed by the individual income tax, even though no local government in Virginia levies an income tax while local governments in eleven states do.² Nationwide, the income tax share of state-local taxes was 23.2 percent, compared to Virginia's 31.1 percent.³

Many things have changed dramatically over the years, including the economy, incomes, and cost of living. The Virginia individual income tax, however, has changed little. Key features of the tax are: (1) the starting point for determining the tax base is federal adjusted gross income (AGI); (2) personal exemptions are \$800 each; (3) the standard deduction is either \$3,000 (single) or \$5,000 (married); and (4) the rate structure has four marginal rates that apply to four brackets, or "slices" of taxable income. Taxable income is defined as AGI less the sum of personal exemptions and deductions. Taxpayers may choose to use the standard deduction or to itemize deductions, although the choice must be the same for the state tax as for the federal tax.

The state's reliance on the income tax has risen substantially. For example, Virginia state government raised 40.2 percent of total taxes from the personal income tax in 1980,⁴ but by 2000 this had risen to 54 percent. Such changes warrant periodic review of tax provisions.

¹ Calculated from state tax collections data from the Census Bureau web site [<http://www.census.gov>].

² Fisher, *State and Local Public Finance*. 1996, 413.

³ Calculated from state-local data for 1998-99, the latest available as of February 2002 on the Census Bureau website [<http://census.gov/govs/estimate99.html>].

⁴ Cline, "Personal Income Tax." 1986, table 2.

Nearly twenty years ago the Virginia individual income tax was the subject of close study,⁵ and the Commission to Study Virginia's State and Local Tax Structure for the 21st Century gave the tax careful consideration in 2000.⁶ This issue paper extends work done in connection with that study commission's effort.⁷

EVOLUTION OF THE INCOME TAX

The Early Twentieth Century

Prior to the 1930s, no state used general sales taxes and relatively few had individual income taxes. Through the 1920s, just thirteen states (including Virginia) had adopted individual income taxes (**Table 1**), and in the late 1920s they accounted for only a small portion of state tax revenue. For example, in 1927, such taxes accounted for 4.54 percent of state tax revenue. At that time, property taxes accounted for nearly one-fourth of state tax revenue, but the development of highway-related taxes to support the increasing popularity of motor vehicles was fast reducing the relative importance of other taxes.⁸

The Great Depression

The Great Depression caused property taxation to become primarily a local tax source. Because the base of the property tax is accumulated asset value, not a current economic flow, the Great Depression saw large increases in property foreclosures and property tax delinquency. In this environment, states sought other revenue instruments with bases that better reflected current ability to pay. The main tax of choice was the general sales tax. The sales tax gained popularity again

⁵ Knapp, Bonventre, and Smith, *Virginia Issues: Reforming the Individual Income Tax*. 1983.

⁶ Commission recommendations on the income tax are presented in Virginia Tax Study Commission 2001, 29-33.

⁷ Bowman, "Virginia Personal Income Tax." 2001b.

⁸ Moody, *Facts & Figures on Government Finance*. 1998, table E11.

Table 1. State Adoptions of Broad-based Individual Income Tax and General Sales Tax, by Year

Income Tax		Sales Tax	
Year Adopted	State	Year Adopted	State
1901	Hawaii ^a	1930	Mississippi
1911	Wisconsin	1933	Arizona, California, Illinois, Indiana, Iowa, Michigan, New Mexico, North Carolina, Oklahoma, South Dakota, Utah, Washington, West Virginia
1912	Mississippi	1934	Missouri, Ohio
1915	Oklahoma	1935	Arkansas, Colorado, Hawaii, ^a North Dakota, Wyoming
1916	Massachusetts, Virginia	1936	Alabama
1917	Delaware, Missouri	1937	Kansas
1919	New York, North Dakota	1938	Louisiana
1921	North Carolina	1947	Connecticut, Maryland, Rhode Island, Tennessee
1922	South Carolina	1949	Florida
1929	Arkansas, Georgia	1951	Georgia, Maine, South Carolina
1930	Oregon	1953	Pennsylvania
1931	Idaho, Utah, Vermont	1955	Nevada
1933	Alabama, Arizona, Kansas, Minnesota, Montana, New Mexico	1960	Kentucky
1934	Iowa, Louisiana	1961	Texas, Wisconsin
1935	California	1965	Idaho, New York
1936	Kentucky	1966	Massachusetts, New Jersey, Virginia
1937	Colorado, Maryland	1967	Minnesota, Nebraska
1961	West Virginia	1969	Vermont
1963	Indiana		
1967	Michigan, Nebraska		
1969	Illinois, Maine		
1971	Ohio, Pennsylvania, Rhode Island		
1976	New Jersey		
1991	Connecticut ^b		

Source: Moody, *Facts & Figures on Government Finance*. 1998, table E79, p. 264.

^a Adoptions preceded Hawaii statehood.

^b Prior to 1991, Connecticut taxed only dividend and interest income.

in the 1960s and 1970s when several states, including Virginia, adopted the general sales tax in response to expenditure pressures resulting in part from the baby boom and the suburbanization of the population.

In 1932, the individual income tax raised over ten times as much revenue as the general sales tax; four years later it raised less than half as much as the sales tax. The income tax yield continued below the sales tax until 1998, when the income tax again surpassed the sales tax. Although several factors contributed to the change in relative importance of the income tax and sales tax, one key factor is their relative income elasticities. Income elasticity is the percentage change in tax divided by the percentage change in income. Income elasticity is greater for income taxes than for sales taxes. The sales tax responds only to what taxpayers purchase, and on average they use only part of their income to make purchases; moreover, many purchases, such as education and healthcare, are not taxable and such nontaxable services account for a rising percentage of income over time. Income taxes are more elastic than sales taxes because they have broader bases, and often have graduated rate structures; fur-

ther, personal exemptions and standard deductions add to elasticity, as shown in **Table 2**.

The first three columns of Table 2 show AGI, taxable income (TI), and tax liability for a family of two with no other dependents, assuming that both members are under 62 years of age and that the standard deduction is taken. TI in this case is AGI minus a \$5,000 standard deduction and two \$800 personal exemptions. Thus, TI is \$6,600 less than AGI for all AGI levels. The Virginia marginal tax rate appropriate to the TI level in each row is shown in the last column. Beginning in the first row, AGI is \$10,000, TI is \$3,400, and tax is \$72. Each \$1,000 increment to AGI increases TI by \$1,000, as well, but this increases TI by a larger percentage than AGI because TI starts at a lower level (see columns 4 and 5). Because personal exemptions and the standard deduction cause a given dollar change in AGI to produce a larger percentage change in TI than in AGI, tax liability would grow faster than income (AGI) even if a single rate were applied at all TI levels. When tax rises more rapidly than AGI, elasticity is greater than one. Because Virginia uses rising marginal tax rates, tax liability rises even more rapidly and produces higher elastic-

Table 2. Effects of \$1,000 Increments to AGI on Taxable Income, Tax Liability, and Tax Elasticity for AGI Values Between \$10,000 and \$30,000 Under Current Virginia Income Tax: Married Couple Under 62, No Other Dependents, Standard Deduction Taken

Adjusted Gross Income (\$)	Taxable Income (\$)	Tax Liability (\$)	% Change from Preceding Row			Tax	
			Adjusted Gross Income	Taxable Income	Tax Liability	Elasticity ^a	Rate (%)
10,000	3,400	72	3.00
11,000	4,400	102	10.0	29.4	41.7	4.17	3.00
12,000	5,400	140	9.1	22.7	37.3	4.10	5.00
13,000	6,400	190	8.3	18.5	35.7	4.30	5.00
14,000	7,400	240	7.7	15.6	26.3	3.42	5.00
15,000	8,400	290	7.1	13.5	20.8	2.93	5.00
16,000	9,400	340	6.7	11.9	17.2	2.57	5.00
17,000	10,400	390	6.3	10.6	14.7	2.33	5.00
18,000	11,400	440	5.9	9.6	12.8	2.17	5.00
19,000	12,400	490	5.6	8.8	11.4	2.04	5.00
20,000	13,400	540	5.3	8.1	10.2	1.92	5.00
21,000	14,400	590	5.0	7.5	9.3	1.86	5.00
22,000	15,400	640	4.8	6.9	8.5	1.78	5.00
23,000	16,400	690	4.5	6.5	7.8	1.77	5.00
24,000	17,400	743	4.3	6.1	7.7	1.79	5.75
25,000	18,400	801	4.2	5.7	7.8	1.86	5.75
26,000	19,400	858	4.0	5.4	7.1	1.78	5.75
27,000	20,400	916	3.8	5.2	6.8	1.79	5.75
28,000	21,400	973	3.7	4.9	6.2	1.68	5.75
29,000	22,400	1,031	3.6	4.7	6.0	1.67	5.75
30,000	23,400	1,088	3.4	4.5	5.5	1.62	5.75

Source: Author's calculations; see text.

^a Percentage change in tax liability divided by percentage change in adjusted gross income.

ity coefficients (see columns 6 and 7). The \$72 tax when TI is \$3,400 (first row) is the sum of \$60 (\$3,000 taxed at 2 percent) plus \$12 (\$400 taxed at 3 percent). As income rises, a larger portion is taxed at the higher marginal rates, so tax liability rises at a higher percentage rate and elasticity is higher. To summarize, if there were no deductions or exemptions, and only one tax rate, the percentage change in tax would be the same as the percentage change in AGI, and elasticity would equal one. Introducing deductions and exemptions causes TI and tax to rise more sharply than AGI, pushing elasticity above one, and graduated rates cause still faster growth of tax.

States have yielded to political pressures to provide tax breaks, or preferences, of various sorts in both income and sales taxes. Such preferences narrow the tax base and thus reduce the revenue obtainable from a given rate structure. In the case of the sales tax, a particularly popular item has been exemption of food, a large category of expenditure. Income taxes, on the other hand, in many cases have grown rapidly as inflation eroded the value of personal exemptions, standard deductions, and the portion of income taxed at lower rates in graduated-rate systems. It is popular to expand these items and many states have. Other states have left these

key features of their income tax codes relatively unchanged for many years. Of course, levying this “inflation tax” enables stronger revenue growth without explicitly raising tax rates. Income tax reductions, as we shall see below, tend to have been more narrowly targeted to particular groups or sources of income, chief among them retirement income.

EVOLUTION OF INCOME TAX FEATURES

National Trends

Three key trends can be seen in state income taxation over the last two decades:⁹ (1) lower statutory rates and a reduced degree of rate graduation; (2) removal of tax liability from those with the lowest incomes, increasingly through provision of tax credits; and (3) expanded exclusion of retirement income from the tax base. Virginia was not part of the first trend, and it was a

⁹ The starting point for comparison is 1979, in part because Clara Penniman's major study of state income taxes, *State Income Taxation* (1980) uses data for 1979. Also, this pre-dates the federal reform of 1986 and the state changes touched off by it.

relatively minor factor in the second; however, the commonwealth embraced the last of these trends. A fourth but lesser trend is the increased conformity of state income taxes to the federal tax, including some federal tax base figure as the starting point for the state tax.¹⁰

Credits

Credits have enjoyed a recent surge in popularity, and some specific credits are discussed below. Although each state's individual income tax rate structure has positive rates, for tax year 2000 effective tax rates at the poverty level for a two-parent family of four (\$17,601) were negative in ten states.¹¹ The effective rate of a tax is the total amount of the tax divided by total income. The explanation for negative effective rates is the existence of refundable credits in those states. Such credits offer the potential to reduce income tax liability below zero. Credits are direct subtractions from tax liability, after application of the statutory tax rates to the statutory base. A refundable credit results in a refund if the credit exceeds tax liability before the credit. For example, suppose a state allows residents an income tax credit of \$50 per person to compensate for a sales tax on food. A family of four would have a total credit of \$200. If gross income tax liability before credits were \$100, the credit would reduce the tax to zero and result in a \$100 payment to the taxpayer.¹²

HISTORY OF VIRGINIA'S INCOME TAX¹³

Rate Structure

The rate structure is one aspect of the Virginia tax that has been remarkably constant over the last several de-

acades. Multiple rates have been in use since 1919, when a two-bracket structure was adopted. The three-bracket structure that is the core of the current tax was adopted in 1926, and the fourth bracket was added in 1972. More specifically, major steps in the evolution of the current tax system have been the following:

- 1919, two brackets established: first \$3,000 taxed at 1 percent, amounts above \$3,000 taxed at 2 percent;
- 1926, three brackets defined: up to \$3,000 taxed at 1.5 percent, next \$2,000 taxed at 2.5 percent, and amounts of \$5,000 and above taxed at 3 percent;
- 1948, same three brackets retained, but marginal rates increased to 2 percent, 3 percent, and 5 percent;
- 1972, fourth bracket added to otherwise unchanged rate structure: amounts over \$12,000 taxed at 5.75 percent; and
- 1987, starting point for 5.75 percent rate raised in stages from \$12,000 to \$17,000.¹⁴

Thus, the current rate structure has gone unchanged for over a decade, but its basic structure has been in place much longer. The widths of the first two brackets have not been changed since 1926, and the rates for the first three brackets have not changed since 1948. The fourth bracket was added over a quarter century ago, in 1972, and this change also capped the third bracket at \$12,000; the rate set then for the top bracket still is in place.

Understanding Exemptions, Deductions, and Credits

Taken together, personal exemptions and standard deductions determine the amount of taxable-source income that is removed from the tax base; in essence, they create a bracket that is taxed at a zero rate. The total of this tax-free amount of income varies with family size and, usually, the marital status of the taxpayer(s). For example, the current amounts for Virginia standard deductions are \$3,000 for a single filer and \$5,000 for a married couple filing jointly, while the personal exemption is \$800 for each member of the taxpayer's family. A married couple filing jointly, and electing not to itemize

¹⁰ In 1979, 32 of 41 state income taxes specified a federal figure as the starting point, while 36 did in 2001; the net increase is in the number specifying federal AGI as the starting point, which rose from 21 to 25. (Penniman, *State Income Taxation*. 1980, table 7; and the Federation of Tax Administrators website [<http://www.taxadmin.org>].) Other starting points are federal taxable income and federal tax liability. These are discussed later in this monograph.

¹¹ Zahradnik, Johnson, and Mazerov, "State Income Tax burdens on Low-Income Families in 2000." 2001, table 2B. The ten states are Colorado, Kansas, Maryland, Massachusetts, Minnesota, New Jersey, New Mexico, New York, Vermont and Wisconsin. By comparison, tax liability for such a family in Virginia was \$341, fifth highest among the states.

¹² If, through withholding, the family already had paid in \$500, its refund would be \$600.

¹³ Unless otherwise noted, presentation of historical developments into the early 1980s is based on Knapp, Bonventre, and Smith, *Virginia Issues: Reforming the Virginia Individual Income Tax*. 1983.

¹⁴ *Code of Virginia*, §58.1-320. This breaking point went to \$14,000 in 1987 and then rose \$1,000 per year, reaching the current \$17,000 in 1990.

deductions, subtracts \$5,000 in arriving at their taxable income, regardless of how many other dependents they have, and subtracts another \$800 for each of themselves and each child in the household. Thus, a childless couple with \$40,000 of adjusted gross income has taxable income of \$33,400, the remainder of \$40,000 less the \$5,000 standard deduction and two \$800 personal exemptions. If the couple has one child, another personal exemption is taken, reducing taxable income to \$32,600; a second child reduces taxable income another \$800, to \$31,800, and so on.

Personal exemptions and standard deductions are subtracted from the tax base before tax liability is calculated. Thus, they result in greater tax savings for taxpayers in higher marginal rate brackets than for those in lower brackets. A taxpayer with \$50,000 of taxable income is in the 5.75 percent bracket of the Virginia income tax. For this taxpayer, the birth of another child reduces taxable income to \$49,200 (\$50,000 less another \$800 personal exemption) and lowers tax liability by \$46 (5.75 percent times \$800). However, a taxpayer with only \$2,500 of taxable income is in Virginia's 2 percent marginal rate bracket. In this case, the birth of another child also reduces taxable income by \$800, but the tax savings is only \$16 (2 percent times \$800). By contrast, tax credits are subtracted from tax liability after application of tax rates, producing direct reductions in tax liability. Thus, a credit produces the same tax savings for all taxpayers, regardless of marginal tax bracket. In effect, exemptions and deductions remove the last dollars of income from taxation while credits remove the first dollars. Taxpayers paying the lowest rate would experience no change in tax liability, but those subject to higher marginal rates would pay more with a credit than an exemption. A credit is a cost-efficient method for providing tax relief for first dollars of income. All taxpayers receive the same benefit without the added cost to the public treasury of an extra benefit for higher income taxpayers.

Personal Exemptions and Standard Deductions

Over the years, personal exemptions have been much less stable in the commonwealth than bracket widths. The 1926 law that created the first two brackets of the current system established personal exemptions of \$1,000 for a single person, \$2,000 for a married couple, and \$400 per dependent. In 1930, the exemptions were increased to \$1,250 for a single person and \$2,800 for a married couple, while dependent exemptions were left unchanged. Later in the Great Depression, in 1934, exemptions were cut to raise additional state revenue;

the new amounts were \$1,000 (single), \$2,000 (married), and \$200 (dependent). By 1967, the dependent exemption was \$600, while the other two figures remained as in 1934; additional \$600 exemptions were provided for those sixty-five and older, and for the blind. In 1972, Virginia adopted a major tax package centered on conformity to the federal tax, including starting from federal adjusted gross income; as part of this, all personal exemptions were set at \$600, even though this level was less than the federal exemption amount and less than the previous state exemption amount for taxpayers and their spouses. This reduction, however, coincided with increases in the standard deduction, which for a few years was set at the federal level. Revenue loss that would result from matching rising federal standard deductions led to ending this aspect of state-federal conformity.

The Federal Tax Reform Act of 1986 increased personal exemptions and standard deductions substantially. Personal exemptions rose from \$1,080 in 1986 to \$2,000 by 1989, and standard deductions were increased to \$3,000 for single people and \$5,000 for married couples as of 1988.¹⁵ As with the 1972 initial move to state-federal conformity, 1987 Virginia legislation adopted (effective in 1989) federal standard deductions of \$3,000 and \$5,000; state personal exemptions, already much smaller than those for the federal tax, were increased to only \$700 in 1987 and \$800 the next year, where they remain.¹⁶ Conformity to federal standard deductions was short-lived, however, because the federal amounts for both standard deductions and personal exemptions were indexed to inflation by the 1986 law. Virginia has neither indexed, nor made discretionary adjustments. As a result, Virginia standard deductions and personal exemptions are far below the federal levels. In comparison to the state values just noted, the 2001 federal amounts are \$4,550 and \$7,600 for standard deductions, and \$2,900 for personal exemptions.¹⁷

Credits

Although Virginia personal exemptions and standard deductions are low in relation to federal levels and relative to poverty thresholds, a credit for low-income individuals (CLI), effective for tax year 2000, is beneficial to many poorer residents.¹⁸ The CLI is \$300 for

¹⁵ Pechman, *Federal Tax Policy*. 1987, 65 and 314.

¹⁶ *Code of Virginia*, §58.1-322, 2.a.

¹⁷ Federal standard deduction and personal exemption amounts for 2001 are from Form 1040 for that year.

¹⁸ *Code of Virginia*, §58.1-339.8. This credit is taken at line 21 of the 2001 Resident Form 760.

each personal exemption, except those for age and blindness, if family AGI, including the income of dependents, is at or below the poverty threshold for the relevant family size.¹⁹ It was designed to eliminate any tax liability below the poverty threshold. The CLI is not available to those who take certain deductions or subtractions from AGI, such as the additional personal exemptions for the elderly and the blind and the additional \$6,000 or \$12,000 age-based deductions (see Appendix A).

Although the low-income credit is an improvement in the situation for those in poverty, it is not a good substitute for setting tax-free amounts high enough to remove poverty income from the tax base. The CLI goes to zero when family AGI rises above the poverty threshold. This creates a large “notch” effect, a discontinuity in the level of tax liability as income rises. With the credit, if income is at or below the poverty level there is

no tax liability, but as little as one dollar of income above the poverty line exposes to taxation all income above the tax-free amount. For example, the 2001 poverty threshold for one person is \$9,214.²⁰ Subtracting the \$3,000 standard deduction and the \$800 personal exemption leaves \$5,414 of taxable income. Virginia tax liability on this amount, before the credit, is \$141. The \$300 CLI is greater, so tax liability is reduced to zero, but the unused credit amount is not refundable. One dollar more income would place that person out of poverty, the credit would not apply, and the \$141 tax bill would have to be paid. In essence, one additional dollar of income gives rise to a \$141 tax, and the notch is greater for larger families, whose poverty thresholds are higher. Because of the abrupt cessation of the CLI, state income tax burdens remain high for those above, but not far above, the poverty line.²¹ In essence, the notch effect taxes back into poverty those in this circumstance, if poverty is gauged by after-tax income.

¹⁹ The CLI is explained, with an example, in Appendix A. For discussion, see Zahradnik, “Virginia Has Improved the Tax Treatment of Low-Income Families.” 2001.

²⁰ U.S. Census Bureau: <http://www.census.gov/ftp/pub/hhes/poverty/threshld.html>.

²¹ The Virginia CLI and the federal earned-income tax credit are discussed in later sections.

STANDARDS, CURRENT CONDITIONS, COMPARISONS, AND RECOMMENDATIONS

INTRODUCTION

This section will pave the way to understanding why reforms to Virginia's individual income tax are needed. It is divided into four subsections that explore the standards for a good tax: horizontal equity, vertical equity, simplicity, and avoidance of adverse economic incentives. Each subsection begins with a description of the standard. Virginia's income tax is then compared to that standard, and then to other states. Finally, some recommendations are offered as to how to bring Virginia in line with the standard. These suggestions are elaborated on further in the section on policy alternatives.

HORIZONTAL EQUITY

Standards

The income tax generally is viewed as an ability-based tax and defended on that basis. Horizontal equity requires that people in equal circumstances pay equal taxes. For the income tax base to reflect taxpayers' relative taxpaying abilities, a comprehensive measure of income must be used because leaving out some sources of income creates inequities. Suppose, for example, that the Smiths and the Joneses are two couples, each with \$25,000 total money income, but that the Smiths receive all their income from taxable sources while the Joneses receive \$12,500 from nontaxable sources. Although the two couples have the same spending power and are in every meaningful sense equally situated, by creating nontaxable categories of income the tax system pretends that they are not. Ignoring 50 percent of the Joneses' income imposes quite different tax burdens on the two couples, creating horizontal inequity. Preferences based on proxies for ability, rather than ability measured by income, similarly create horizontal inequity. When the base of the tax is income, there is no convincing rationale for resorting to proxies for need, such as age or disability, in determining tax liabilities. According to a recent book on state taxation, "The failure to achieve horizontal equity

illustrates one of the individual income tax's most significant problems."²²

Current Conditions

Several provisions of the current Virginia individual income tax depart from the standard of horizontal equity. Two of the most important ones are preferences based on the age of the income recipient and preferences based on income source, which are discussed below.

Age-based Preferences

Age-based preferences present in the Virginia income tax violate horizontal equity, even if the complete exclusion of Social Security benefits from the Virginia tax base is ignored. The additional personal exemption for those aged 65 and over is one source of horizontal inequity, albeit a relatively small one, given the \$800 exemption size. Of much greater importance are the additional deductions of \$6,000 (ages 62-64) and \$12,000 (65 and over), which add to the tax-free amounts for families with qualifying members. These deductions work in the same manner as personal exemptions or standard deductions, and are available for each person of qualifying age. Thus, total tax-free amounts vary significantly from family to family, depending upon the ages of the spouses.

Table 3 defines tax-free amounts as all income that can be offset under current Virginia law by personal exemptions, standard deductions, and additional deductions for those 62 and over; it ignores itemized deductions and preferences based on the source of income, such as Social Security. The table also shows these tax-free amounts both in dollars and as percentages of 1998 poverty thresholds,²³ which are shown in panel 1. Reflecting the tax provisions, three taxpayer age groups

²² Brunori, *State Tax Policy: A Political Perspective*. 2001, 96.

²³ Poverty thresholds for 1998 are used because the revenue simulations for alternative income tax structures, later in this report, are based on 1998 returns.

Table 3. Virginia Tax-free Amounts Under the Current Tax Structure and 1998 Poverty Thresholds for Selected Family Sizes

	Number of Persons in Family					
	One	Two	Three	Four	Five	Six
Panel 1. 1998 Poverty Thresholds						
Poverty threshold	\$8,316	\$10,634	\$13,120	\$16,530	\$19,453	\$21,780
Index (2 people = 100)	78%	100%	123%	155%	183%	205%
Panel 2. Current Tax-Free Amounts for Taxpayers Under Age 62						
Tax-free amount ^a	\$3,800	\$6,600	\$7,400	\$8,200	\$9,000	\$9,800
Tax-free/poverty threshold	46%	62%	56%	50%	46%	45%
Panel 3. Current Tax-Free Amounts for Taxpayers Aged 62-64						
Tax-free amount ^b	\$9,800	\$18,600	\$19,400	\$20,200	\$21,000	\$21,800
Tax-free/poverty threshold	118%	175%	148%	122%	108%	100%
Panel 4. Current Tax-Free Amounts for Taxpayers Aged 65 and Over						
Tax-free amount ^c	\$16,600	\$32,200	\$33,000	\$33,800	\$34,600	\$35,400
Tax-free/poverty threshold	200%	303%	252%	200%	178%	163%

Source: U.S. Bureau of the Census, *Poverty in the United States 1998*, 1999, Current Population Reports P60-207, table A-2; and author's calculations based on Virginia income tax provisions and proposed changes.

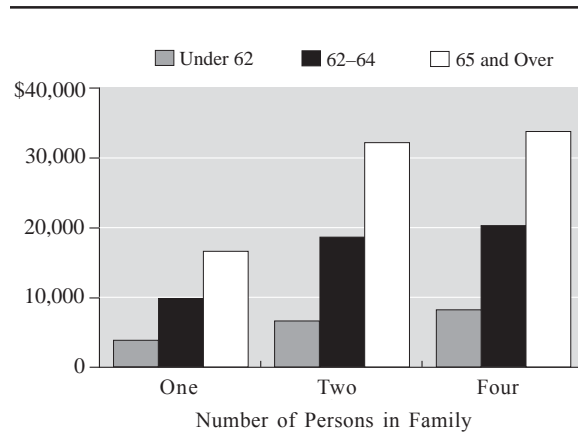
^a Personal exemptions = \$800 each; standard deductions = \$3,000 single, \$5,000 married. These are the provisions that determine the tax-free amounts for people under 62 years of age. Note that the Virginia CLI, applicable only if income is at or below poverty, is not reflected here.

^b Adds to panel 2 tax-free amount additional deductions of \$6,000 (single) or \$12,000 (two or more).

^c Adds two additional personal exemptions (\$800 single; \$1,600 two or more) and additional deductions of \$12,000 (single) or \$24,000 (two or more) to panel 2 tax-free amounts.

are considered – under 62 years (panel 2), 62-64 years (panel 3), and 65 years and over (panel 4). For each, tax-free amounts are presented for families varying in size from one to six members. To hold down the number of permutations, the examples assume that families of two or more include two spouses, and that both spouses are in the same age group. The table makes clear that the elderly fare much better than the non-elderly, principally as a result of the additional deductions of \$6,000 and \$12,000.

It is interesting to note that in all the cases for the elderly shown in Table 3, significantly more than the poverty level of income is removed from the tax base by the current Virginia tax provisions. By contrast, no younger family of any size is able to take its poverty level of income out of the tax base. Such differences defy reason. The disparity is compounded if the elderly taxpayers receive Social Security benefits, which Virginia fully exempts, and which are not reflected in the Table 3 examples. **Figure 1** provides a graphic comparison of the differences in tax-free amounts.

Figure 1. Current Tax-free Amounts, Except Social Security, Elderly and Non-elderly Families

Source: *Code of Virginia*, Section 58.1-322

Differences in tax-free amounts translate into differences in effective tax rates, defined here as tax liability

Table 4. Effective Tax Rates Under Current Virginia Individual Income Tax at Selected AGI Levels for Selected Family Sizes, by Elderly or Non-elderly Status of Taxpayer and Spouse

AGI Level ^a	One Person (%)			Married Couple (%)			Couple & Two Dependents (%)		
	Under 62	62-64	Over 64	Under 62	62-64	Over 64	Under 62	62-64	Over 64
\$15,000	2.87	0.87	0.00	1.93	0.00	0.00	0.00	0.00	0.00
\$25,000	3.85	2.52	1.16	3.20	0.76	0.00	2.83	0.46	0.00
\$50,000	4.80	4.11	3.33	4.48	3.10	1.53	4.29	2.91	1.35
\$80,000	5.16	4.72	4.24	4.95	4.09	3.13	4.84	3.98	3.00
\$120,000	5.35	5.07	4.74	5.22	4.64	3.99	5.14	4.57	3.92
\$200,000	5.51	5.34	5.14	5.43	5.09	4.70	5.39	5.04	4.65
\$500,000	5.65	5.59	5.51	5.62	5.48	5.33	5.60	5.47	5.31

Source: Author's calculations.

Note: Effective tax rate = tax liability as a percentage of AGI.

^a Social Security is ignored so the preferences to the elderly are understated.

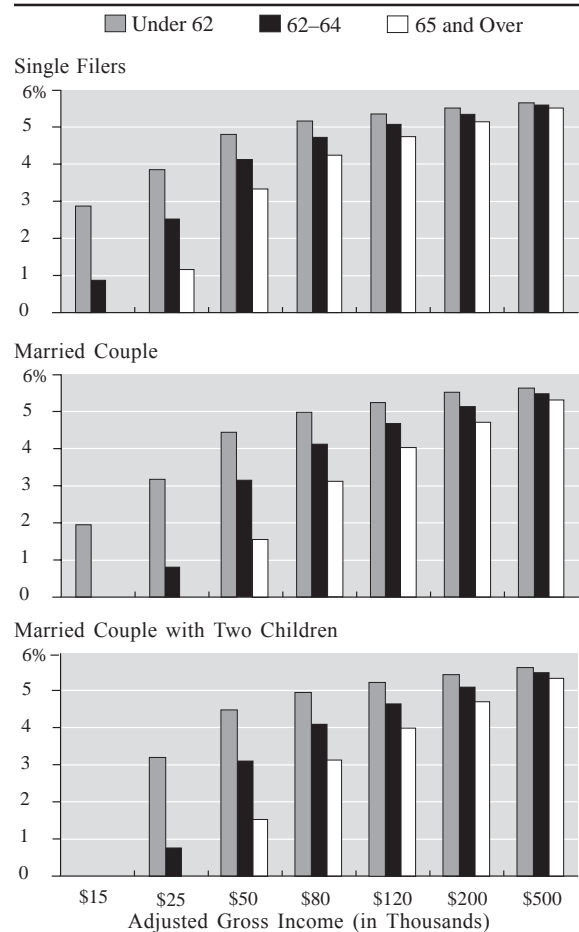
as a percentage of AGI²⁴ (Table 4 and Figure 2). The differences are substantial, especially at lower income levels. (To focus on the effects of the different tax-free amounts, these examples assume no itemized deductions and no income from Social Security or other sources that are not taxable.) For example, a single person with \$15,000 AGI pays an effective tax rate of 2.87 percent if under 62, 0.87 percent if 62 to 64, but zero if 65 or older. For any family size, the differences become smaller at higher income levels, because the tax-free amount becomes a smaller percentage of AGI. Thus, by the time AGI reaches \$500,000, effective tax rates for single persons under 62 and 65 or over are nearly the same – 5.65 percent and 5.51 percent, respectively.

The effect of increasing family size is a bit more complex, as Table 4 shows. Married couples at all income levels get an additional \$800 personal exemption and \$2,000 more as a standard deduction, and the four-person family gets yet another two personal exemptions. For any age group, therefore, the effective tax rate is less for a larger family than for a smaller one. For the \$15,000 AGI level and the under 62 age group, as shown by Table 5, the effective tax rate for a family of four is zero. Because \$15,000 is below the poverty line for this family, the CLI applies.²⁵ This creates a large difference in tax liabilities for the different family sizes. Although most would agree that family size, as well as income amount, is an important consideration in defining equal circumstances for horizontal equity, the appropriate

²⁴ Effective tax rates enable comparisons that abstract from specific provisions of the tax code, whether across taxing jurisdictions or for a given jurisdiction under alternative tax treatments. To do this, the effective tax rates must be calculated relative to some standard base. AGI is not the perfect base for this, because it is not as broad as one would like; however, it is the broadest measure available for the Virginia comparisons, and it does permit the effects of differing subtractions from AGI for different taxpayers to be shown.

²⁵ Without the CLI, the tax would be 1.4 percent.

Figure 2. Effective Tax Rates Under Current Tax for Selected AGI Levels, Ages, and Family Sizes



Source: Author's calculations.

Table 5. Effective Tax Rates for AGI of \$15,000

Taxpayer Age	Number of People in Family		
	One	Two	Four
Under 62	2.87%	1.93%	0
62 to 64	0.87%	0	0
65 and older	0	0	0

Source: Excerpt from Table 4.

degree of differentiation is an open question. For this AGI level, the tax for those 65 and over is zero for all family sizes. The additional deduction of \$24,000 for the elderly couples keeps effective tax rates close to zero higher up the AGI scale. Up through \$50,000 of AGI, the effect is enough to reduce effective tax rates for the elderly at least one and a half percentage points below those for the non-elderly (Table 4). The difference remains substantial up to \$200,000 of AGI.

These age-based preferences are a less defensible source of tax variation. For the \$25,000 AGI level, as shown in **Table 6**, the effective tax rate for a single person under 62 is more than three times as great as for a person aged 65 or older – 3.85 percent and 1.16 percent, respectively. The difference is even greater for married couples at this AGI level, with effective rates for non-elderly and elderly, respectively, of 3.20 percent and zero.

Table 6. Effective Tax Rates for AGI of \$25,000

Taxpayer Age	Number of Persons in Family		
	One	Two	Four
Under 62	3.85%	3.20%	2.83%
62 to 64	2.52%	0.76%	0.46%
65 and over	1.16%	0	0

Source: Excerpt from Table 4.

The main motivation for this disparate income tax treatment based on age is political. The deduction of \$6,000 for a person age 62-64 or \$12,000 for a person over age 64 is the most recently added break. A 1989 U.S. Supreme Court decision arising out of a case in Michigan²⁶ ruled it was not constitutional to tax retirement benefits of federal retirees while exempting the retirement benefits of state employees. Virginia was one of several states that had to change its tax laws, and these deductions are the result. Initially, the subtraction was reduced by the amount of Social Security benefits, but this was changed in the mid 1990s. There is both good news and bad news in Virginia's approach. The good news is that it does not create as much horizontal inequity within the elderly cohort as some other states' approaches, because Virginia does not distinguish among sources of income in granting the \$6,000 or \$12,000 deduction.²⁷ The bad news is that the horizon-

²⁶ *Davis v. Michigan Department of Treasury*, decided in 1989, as cited in Russell, *Individual Income Tax Provisions in the States*. 2001, 4.

²⁷ Recall that increased preferences based on age is one of the trends among state income taxes identified earlier. A later section, centered on Tables 7 and 8, compares Virginia to other states.

tal inequities between elderly and non-elderly families are huge. Furthermore, because Social Security is more significant for some elderly persons than for others, its full exclusion causes some horizontal inequities among the elderly, as well. A better overall approach is to allow realistic tax-free amounts to people of all ages, with the same amount allowed regardless of age. Differences in living costs arising from expenditures in any deductible category can be taken care of through itemized deductions.²⁸

Social Security benefits never have been taxable in Virginia, nor were they taxable by the federal government until the mid 1980s. The 1983 Social Security amendments, however, made a portion of Social Security benefits taxable under the federal income tax.²⁹ States such as Virginia, which define their state income tax bases starting from the federal code, would have made Social Security taxable to the same extent the federal tax does, had they taken no further action.

Income Source Preferences

The commonwealth also violates horizontal equity with exemptions other than age-based preferences. For example, effective January 1, 2000, the state allows up to \$15,000 of basic military pay to be excluded from taxable income for members of the armed forces on extended active duty for at least ninety days, although this subtraction phases out at \$30,000 of basic pay.³⁰ Arguments for such preferences generally are motivated by concern about low pay for certain armed forces members, and/or appreciation for the risks incurred while on active duty. The problem with such preferences is that people with the same income end up pay-

²⁸ Interestingly, the government defines a lower poverty threshold for individuals 65 and over than for younger people (Census 2001, table 756). In 1998, an individual under 65 years of age was considered to be in poverty with income less than \$8,480, while a person 65 or older was not considered to be in poverty until his or her income fell below \$7,818; the difference is about 8 percent. For couples, the poverty threshold for those 65 and over is 10 percent below that for a younger couple. These differences reflect differences in costs of living, as calculated by the government.

²⁹ Total income has to rise above a given level before any Social Security benefits are taxable; taxpayers between the first of two thresholds have up to 50 percent of their benefits taxable, while those above the second threshold have as much as 85 percent taxable; a large number of Social Security recipients have none of their benefits taxable. For a brief explanation, see Penner, *Tax Benefits of the Elderly*. 2000.

³⁰ *Code of Virginia*, §58.1-322 C. 23. The subtraction is reduced by \$1 for each dollar of basic pay in excess of \$15,000, so that at \$30,000 of basic military pay, there is no subtraction allowed.

ing very different amounts of tax, a violation of the principle of horizontal equity. One may question whether the pay is lower and the risks higher than for certain other occupations, such as police officer or fire fighter. Moreover, the fact that military service is, and for many years now has been, entered into voluntarily rather than by conscription, certainly weakens the rationale for special tax breaks for this one category of worker. The broader point, however, is that an income tax should not differentiate tax liabilities according to the sources of income. “The failure to achieve horizontal equity illustrates one of the individual income tax’s most significant problems. ... Despite widespread calls from economists and commentators to limit the use of tax preferences, state political leaders have been unable to resist the temptation to provide income tax breaks.”³¹ Such preferences move the tax away from a true tax on income or ability.

The Marriage Penalty

There is a disparity in tax-free amounts between single people and married couples that results from three things, the combination of which poses a trade-off among objectives. First, the poverty threshold for a single person is nearly four-fifths as high as for a married couple (see Table 3, panel 1). In combination with Virginia’s personal exemptions of \$800 each, the standard deduction for a single person would have to be \$7,516 if the sum of the two were to remove poverty income from the tax base. For a married couple, with \$1,600 removed by their two personal exemptions, the standard deduction would have to be \$10,034. This combination would result in a substantial “marriage tax” because two unmarried people would be able remove \$16,632 from the tax base, an amount more than 55 percent above the poverty threshold for two people. To avoid the marriage penalty while keeping the tax-free amount for two people reasonably close to the poverty line necessarily means allowing a single person a tax-free amount less than the poverty threshold.

Comparisons

The politics of removing horizontal inequities undeniably are difficult. Typically, the differences have been introduced as a result of lobbying on behalf of the favored group, most importantly the elderly. Virginia is not unique in granting special tax concessions to the elderly. However, Virginia carries the practice to a more

extreme level than in most other states. The Retirement Project at The Urban Institute recently studied comparative income tax treatments of elderly and non-elderly taxpayers, using 1998 federal and state tax provisions.³² While the study is limited to couples and considers only four specified income levels, it has two very strong points. First, it includes calculated income tax burdens under the various state income taxes for couples at each of the four income levels. Second, it uses data from federal income tax returns to construct realistic combinations of different sources of income, so it is not strictly hypothetical; this was done because the tax treatment of different sources of income varies in the federal tax code, and both within and among the states’ tax codes. The four combinations of earnings and income levels used in the study, represented by couples A-D, are shown in **Table 7**.

Table 7. Urban Institute Hypothetical Couples

	Earnings ^a	Total Income
Couple A	\$4,251	\$28,323
Couple B	\$3,638	\$67,372
Couple C	\$19,027	\$39,480
Couple D	\$40,556	\$83,573

Source: Excerpt from Table 8.

^a Earnings (wages, salaries, and proprietorship income) are a subset of total income which also includes sources such as interest, dividends, rent, realized net capital gains, pensions/annuities, and Social Security.

Couple A has low earnings and low total income. Couple B has low earnings but relatively high total income due to other forms of income. Couple C has high earnings but relatively low total income. Couple D has high earnings and high total income. **Table 8** shows tax liabilities calculated for each of those four income levels for both non-elderly couples and elderly couples; differences between the age groups result from preferences for the elderly not available to the non-elderly couples. The Virginia age-based tax reductions are 38 percent (couple D), 51 percent (couple B), and 100 percent (couples A and C) of the tax due from non-elderly couples with equal income. In addition, to make comparisons across states with different levels of taxes, the study calculated the value of the preferences as a percentage of income. On this basis, the Virginia elderly reductions are seen to be relatively high. They range from 1.9 percent to 4.3 percent of income, which places them anywhere from 140 percent to 192 percent of the median state’s elderly preferences.

³¹ Brunori, *State Tax Policy: A Political Perspective*. 2001, 96.

³² Penner, *Tax Benefits of the Elderly*. 2000.

Table 8. Preference for Couples Over 65 Years of Age Under the Virginia Income Tax, Compared to Non-elderly Couples with Same Total Income, Virginia Relative to Other States, 1998

Income Sources and Tax Information Items	Low-earnings Couples		High-earnings Couples	
	A	B	C	D
Assumed earnings and income				
Earnings	\$4,251	\$3,638	\$19,027	\$40,556
Pensions/annuities	\$9,213	\$27,128	\$5,582	\$19,219
Interest and dividends	\$4,240	\$20,272	\$1,331	\$8,836
Social Security	\$10,619	\$16,334	\$13,540	\$14,962
Total income for elderly couples ^a	\$28,323	\$67,372	\$39,480	\$83,573
Virginia				
Taxes, for couples with both spouses 65 or older	0	\$1,607	0	\$2,618
Taxes, same total income, both spouses under 62	\$1,037	\$3,283	\$1,679	\$4,214
Elderly tax preference (reduction), in dollars	\$1,037	\$1,676	\$1,679	\$1,596
Elderly tax preference, percent of non-elderly tax liability	100.00%	51.10%	100.00%	37.90%
Tax preference for elderly as percent of income	3.70%	2.50%	4.30%	1.90%
All States				
Maximum preference for elderly	5.60%	6.40%	4.70%	4.30%
Median preference for elderly	2.65%	1.30%	2.50%	1.05%
Virginia elderly preference as percent of median	140.00%	192.00%	172.00%	181.00%
Rank of Virginia (position from highest)	8	8	3	7

Source: Penner, *Tax Benefits of the Elderly*. 2000, 8-11 (rows 1-8, 10-11), and author's calculations from data presented there.

Note: Because Alabama, Arkansas, Massachusetts, Mississippi, New Jersey and Pennsylvania do not have income tax systems that favor the elderly, they were omitted from Penner's study along with the nine states that have no individual income tax (see Table 18). The District of Columbia, however, was included.

^a Penner used combinations of income said to be representative of real-world elderly couples, based on data from federal income tax returns, because income source is of importance in many states' tax codes and the federal tax code.

Another view of this is given by Figure 2, which contains examples of the effective tax rates (tax as a percentage of AGI) for three sets of families of three different sizes - a single individual, a married couple, and a married couple with two dependent children. The three sets of families differ only in the ages of the taxpayer and spouse (if any). In one, the adults are under 62 years of age and thus not eligible for the age-based preferences offered by Virginia tax law. In the second set, the adults are 62-64 years of age and thus eligible for some of the age-based preferences, and in the third set the adults are over 64 years of age and eligible for all Virginia age-based preferences.

Recommendations

If an income tax is to reflect ability to pay, there is no place for preferences based on the age of the income recipient, the source of income, or other extraneous considerations. Such special treatment is inconsistent with the principle of horizontal equity. Currently, however, additional deductions for the elderly are extremely popular, so it is unlikely that they can be eliminated altogether, at least anytime soon. Likewise, failure to tax Social Security benefits to the same extent as under

the federal income tax, as discussed earlier, provides another aspect of nonuniform treatment of taxpayers based upon age. People of all ages, and regardless of their income sources, should be taxed in the same manner. While the suggestions no doubt could not be implemented in one step, they nevertheless are desirable to improve equity. Serious consideration should be given to phasing in the changes. A public education program to make clear the rationale for the changes, and the implications of failing to make them, could help provide support for the changes.

The Marriage Penalty

It is a matter of judgment how this dilemma should be resolved, but clearly it is not possible to achieve simultaneously what seems right in all cases. Virginia historically has allowed married couples to file combined returns, permitting each spouse's income to be considered separately and giving each the first \$3,000 at 2 percent, and so on, through the brackets. Beginning with tax year 2000 a new form was adopted that eliminates the combined filing option, but provides a spouse tax adjustment (STA) designed so that, "Using the STA, couples filing jointly do not pay any more taxes than if

they filed separately.”³³ This policy suggests a strong aversion to the marriage penalty. A standard deduction for a married couple equal to twice that for a single person, set low enough to keep the tax-free amount close to the poverty level for most filers, would be appropriate and consistent with this policy.³⁴ To remove poverty income from the tax base, Virginia’s personal exemption and standard deduction levels should be increased substantially (Table 3), setting the standard deduction for a couple equal to twice that for a single person. Further, additional exemptions based on age and blindness should be eliminated to improve horizontal equity. Suggested exemption and deduction levels are set forth in the section on policy alternatives.

VERTICAL EQUITY

Standards

Unlike horizontal equity, vertical equity is concerned with the relative tax burdens of those with *differing* ability to pay. While the appropriate set of relative tax burdens across all income levels is a matter of judgment, it is easier to gain agreement that the very poor should pay relatively little.

Current Conditions

Vertical equity is compromised by the small standard deductions and personal exemptions in Virginia, which combine to create tax-free amounts that are well below poverty thresholds for families of different sizes, as shown in Table 3 and by **Figure 3**. In addition to leaving some poverty income in the tax base, rate graduation tops out at a relatively low level of taxable income. This taxing of poverty income occurs in part because the commonwealth has failed to adjust personal exemptions and standard deductions for inflation, either by indexing or by periodic discretionary changes. With the implementation of the CLI for 2000, this concern is more for those above the poverty line, and especially those not far above it, than for those below the line.

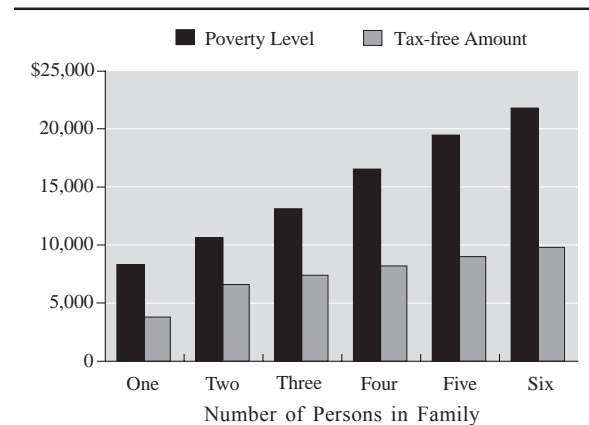
³³ 2001 *Virginia Resident Individual Income Tax Booklet*, p. 10. The STA is taken at line 16 of the 2001 Form 760.

³⁴ Data provided by the Department of Taxation as part of the simulation exercise show single filers accounted for 47 percent of all taxable returns but just 26 percent of tax liability for 1998, while married-combined returns represented 32 percent of returns and 53 percent of tax liability.

Comparisons

Although systematic evidence on relative income tax burdens across income levels for the various states is lacking, there is evidence that states have taken steps to reduce tax burdens for those at the low end of the income scale. Between enactment of the 1986 federal Tax Reform Act and 1990, many states enacted very significant individual income tax reforms, including larger personal exemptions or credits (22 states), increased standard deduction (23), reduced rates (18), and complete restructuring of the tax (8); in part, these changes cut, and in some instances eliminated, income tax burdens at low income levels.³⁵ Although there was relatively little activity in the early 1990s, many changes beneficial to the poor were made by states in the latter part of the decade. A recent study reports that during the 1990s, most states raised the threshold below which no tax is owed.³⁶ That study treats the District of Columbia as a state, so it reports on 42 broad-based income taxes. While 24 states had tax thresholds below the poverty line for a two-parent family of four in 1991, 23 of those increased their thresholds by year 2000, and on average the state income tax liability for such a family fell. In only five of the twenty-three states, though, was the change enough to result in zero liability at the poverty level, and in twelve the tax liability at the poverty level for such a family actually rose, although by less than it would have had there been no

Figure 3. Personal Exemptions and Standard Deductions Below 1998 Poverty Levels for the Non-elderly



Source: U.S. poverty guidelines (see Table 5) and *Code of Virginia*.

³⁵ Gold, *State Fiscal Agenda for the 1990s*, 1990, 113-14. The figures in parentheses indicate the number of states making the changes.

³⁶ Zahradnik, Johnson, and Mazerov, “State Income Tax Burdens on Low-Income Families in 2000.” 2001, 1271.

change. Moreover, virtually all states with tax thresholds above the poverty line in 1991 made upward adjustments in the following years that kept their thresholds at or above the poverty line. Virginia raised its filing thresholds effective in 1987, but has not changed them since. Prior to that date, the universal threshold was \$3,000; beginning in 1987, the threshold became \$5,000 for single individuals and \$8,000 for married couples filing jointly.³⁷ Both thresholds are well below the poverty levels discussed above.

The Earned-income Tax Credit

States have increased their tax thresholds in two principal ways. First, they took the more traditional route of increasing personal exemptions and standard deductions. As Steven Gold reported in 1990, the majority of states took this action in the late 1980s, with the federal tax reform serving as catalyst. A more recent report concurs on the importance of the federal government's role. "President Ronald Reagan spoke forcefully in the mid-1980s about the foolishness of taxing poor households deeper into poverty. In 1986, as part of an overall tax reform package, the federal government eliminated income tax liability for poor families."³⁸ This newer study also reports on the second approach, the earned-income tax credit (EITC). By now, many states also have turned to the EITC, a device that can be even more effective in reducing tax burdens at low-income levels and thereby increasing progressivity. Both this and the more traditional route were followed in the 1990s.³⁹ In 1990, five states had earned-income credits (two refundable), but by 2000 there were fifteen; although all fifteen were linked to the federal EITC, only ten were refundable.⁴⁰ The state credits range from as little as 4 percent of the federal credit to over 40 percent; the most common figure is 10 percent (five states), but several states have increases scheduled to take effect over the next few years.

³⁷ *Code of Virginia*, §58.1-321.

³⁸ Zahradnik, Johnson, and Mazerov, "State Income Tax Burdens on Low-Income Families in 2000." 2001, 1271.

³⁹ Zahradnik, Johnson, and Mazerov, "State Income Tax Burdens on Low-Income Families in 2000." 2001, 1282.

⁴⁰ The 10 refundable credits were in Colorado, District of Columbia, Kansas, Maryland, Massachusetts, Minnesota, New Jersey, New York, Vermont, and Wisconsin. Nonrefundable state credits tied to the federal credit were in Illinois, Iowa, Maine, Oregon, and Rhode Island. Zahradnik, Johnson, and Mazerov, "State Income Tax Burdens on Low-Income Families in 2000." 2001, 1297.

Like any tax credit, the EITC is subtracted from whatever income tax liability there may be. For example, if a taxpayer has \$3,500 federal income tax liability before the EITC, and is entitled to an EITC of \$3,000, the net tax liability is reduced to \$500. What sets the EITC apart from most other tax credits, however, is that it is refundable in the case of the federal tax and several state taxes, as already noted. That is, if the credit is greater than tax liability before the credit, the difference is refunded. Thus, a tax filer with \$500 tax liability and a \$3,000 EITC would get a \$2,500 check from the government for the excess of the credit over tax liability. A nonrefundable credit would wipe out the \$500 tax liability, but would not result in any payment to the taxpayer – i.e., it would not produce a "refund." The terminology may be confusing. It is not necessary that the filer have paid any tax, so technically the payment may not be a refund. As one author puts it, "The program provides a *negative tax payment* (actually a transfer of income) to low-income earners. Notice that this is not a tax refund – it is a payment from the federal government to workers who file income tax returns. Persons eligible for the EITC file a regular income tax return but instead of paying taxes or receiving a full or partial refund on taxes already paid, they actually get a payment from the federal government."⁴¹

The federal EITC, which serves as the basis for several state credits, is available only under certain circumstances. First and foremost, as the name suggests, this credit is available only to those who have earned income (wages, salaries, and proprietorship income); dividends, interest, and other sources of unearned income do not qualify. In addition, claimants cannot have more than a relatively low amount of investment income (\$2,450 for 2001), and they cannot be in the "married, filing separately" filing category. The EITC strongly favors households with minor children present. Although the credit is available to those with no children in the household, it is more generous if there is a qualifying child, and even larger if there are two children; however, the third and subsequent children do not increase the credit amount. For 2001, the maximum credit amount of \$4,008 is available to filers with two or more children and total earned income in the \$10,000-\$10,750 range; the credit for these filers falls to zero when earned income reaches \$32,121. As shown in **Table 9**, the maximum credits for filers with just one child and those with no children are much lower (about 56 percent and

⁴¹ Hyman, *Public Finance: A Contemporary Application of Theory to Policy*. 2002, 273-74.

9 percent of the maximum credit, respectively), and they phase down to zero at lower levels of earned income.⁴²

Table 9. Federal Earned-income Tax Credit, 2001

Number of Eligible Children	Maximum Credit Amount	Maximum Credit for Incomes of	Credit Reaches Zero at Income of
0	\$364	\$4,750 - \$5,900	\$10,710
1	\$2,248	\$7,100 - \$10,750	\$28,281
> 1	\$4,008	\$10,000 - \$10,750	\$32,121

Source: *Earned Income Credit*, IRS Publication 596. 2001.

Under the current tax the Virginia credit for low-income individuals (CLI) provides needed relief to many taxpayers, according to a recent national study.⁴³ Although that study does not consider Virginia's nonrefundable CLI to be an EITC,⁴⁴ the Virginia credit nevertheless has the effect of raising the tax threshold (below which no tax is owed) for taxpayers eligible for the credit. The study found, though, that the Virginia credit is not enough to eliminate tax liability for a family of four at the poverty level because of different definitions of the poverty level;⁴⁵ in fact, the study found that Virginia is one of 12 states in which tax liability for a family of four at the poverty line actually increased between 1994 and 2000, and that the Virginia increase (\$124) was the largest.⁴⁶ Increased tax liability at poverty level can occur in spite of an increased absolute income level below which no tax is owed because the poverty level rises with the price level, while bracket widths, personal exemptions, and standard deductions often do not. Despite Virginia's failure to adjust for inflation, its credit

was sufficient to raise the tax threshold above the poverty line for a family of three.⁴⁷

A principal weakness of the Virginia CLI is that it abruptly terminates when income rises above the poverty line. The federal EITC and the state credits piggybacked on it avoid this problem, but they provide much more generous benefits to taxpaying units with dependent children. This is dealt with below, in considering possible policy actions in Virginia.

State Rate Structures

Rate structures have two components. One is the bracket structure, which consists of the number of brackets (or "slices") of income defined for the application of statutory marginal tax rates, and the other is the schedule of statutory rates. These features are summarized below.

Number of Brackets

States starting from federal tax liability impose a single tax rate on that base, since the base incorporates the effects of the federal rate structure, including its progressivity. These states are omitted from the following discussion. States tying their taxes to one of the other two federal starting points may adopt either graduated rates of their own or a flat rate. Most states have opted for graduated rates. Virginia currently has four brackets, one less than the median for states using graduated rates (**Table 10**). Six states have single-rate taxes; among states with graduated rates, the smallest number of brackets is two (Connecticut) and the largest is ten (Missouri and Montana). This reflects substantial compression of brackets, particularly after the 1986 federal tax reform; in 1979, there were five single-rate states and twelve states had more than ten brackets, including two with twenty-four brackets.⁴⁸

Bracket Widths

Thirty-four states define their own graduated-rate structures. For 2001, the median first-bracket ceiling is \$3,575 and the mean is \$6,060 (**Table 11**); both are larger than Virginia's \$3,000 ceiling, which has not been changed since 1919. Similarly, the median floor for the top bracket for 2001 is \$30,000 and the mean is \$44,454 (**Table 12**), while Virginia's top bracket begins at \$17,000. The

⁴² The amounts – which are indexed annually for inflation – are for tax year 2001, as given in IRS Publication 596: <http://ftp.fedworld.gov/pub/irs-pdf/p596.pdf>.

⁴³ Zahradnik, Johnson, and Mazerov, "State Income Tax Burdens on Low-Income Families in 2000." 2001.

⁴⁴ *Code of Virginia*, §58.1-339.8; enacted in 2000. This is said not to be an "earned-income tax credit" because "the amount of the credit is not based on the federal EITC and thus the value of the credit does not change as earnings change" (Zahradnik, "Virginia Has Improved the Tax Treatment of Low-Income Families." 2001, 1.). The Virginia credit also differs from the federal credit in being nonrefundable.

⁴⁵ Zahradnik, Johnson and Mazerov, "State Income Tax Burdens on Low-Income Families in 2000. 2001, 1270, fn. 7. States that Virginia uses U.S. Department of Health and Human Services poverty guidelines, which are somewhat below the Census Bureau's poverty levels, more commonly used. For 2000, the Virginia threshold for a family of four was \$17,100, \$501 below the Census poverty line (1273, table 1B).

⁴⁶ Zahradnik, Johnson, and Mazerov, "State Income Tax Burdens on Low-Income Families in 2000." 2001, 1287-88.

⁴⁷ Zahradnik, Johnson, and Mazerov, "State Income Tax Burdens on Low-Income Families in 2000." 2001, 1267.

⁴⁸ Penniman, *State Income Taxation*. 1980, table 6.

states vary substantially (see summary statistics in Tables 11 and 12), and some have even more outdated bracket structures than Virginia, including Maryland, where the fourth and highest bracket starts at \$3,000 (Table 10). However, while Virginia's bracket structure has gone essentially unchanged for several decades, many states have made significant changes in recent years; in general, brackets have become wider, as well as less numerous. In 1979, Virginia's first-bracket ceiling was higher than the \$1,000 median and its current \$17,000 threshold for the top bracket is not much different from the 1979 median (\$17,750), although it is well below the 1979 mean (\$36,368).⁴⁹ As the cost-of-living and income levels rise, it is appropriate that in-

come tax brackets, in a graduated-rate system, be made wider.

Indexing Bracket Widths

Most states, including Virginia, define a specific bracket structure in their tax codes, setting the number of brackets and the range of income each bracket includes, as well as the marginal tax rate applicable to each. In such systems, changing bracket widths requires discretionary changes to the statutes. In this setting, widening the brackets is a form of tax reduction (assuming unchanged marginal tax rates), so it may generate opposition from those wishing the state government to

Table 10. Selected Features of Broad-based State Individual Income Tax Rate Structures for Single Filers, as of January 1, 2001

State	Number of Brackets	Range of Rates ^a (%)	Top Bracket Starts ^a (\$)	State	Number of Brackets	Range of Rates ^a (%)	Top Bracket Starts ^a (\$)
Alabama	3	2.00 - 5.00	3,000 ^b	Mississippi	3	3.00 - 5.00	10,000
Arizona	5	2.87 - 5.04	150,000 ^b	Missouri	10	1.50 - 6.00	9,000
Arkansas	6	1.00 - 7.00	25,000	Montana	10	2.00 - 11.00	73,000
California	6	1.00 - 9.30	35,792 ^b	Nebraska	4	2.51 - 6.68 ^b	26,500 ⁱ
Colorado	1	4.63		New Jersey	6	1.40 - 6.37	75,000 ^j
Connecticut	2	3.00 - 4.50	10,000 ^b	New Mexico	7	1.70 - 8.20	65,000 ^k
Delaware	7	2.20 - 5.95	60,000	New York	5	4.00 - 6.85	20,000 ^b
Georgia	6	1.00 - 6.00	7,000 ^c	North Carolina	3	6.00 - 7.75	60,000 ^l
Hawaii	8	1.50 - 8.50 ^d	40,000 ^b	North Dakota	8	2.67 - 12.00	50,000
Idaho	8	2.00 - 8.20	20,000 ^b	Ohio	9	0.691 - 6.98	200,000
Illinois	1	3.00		Oklahoma	8	0.50 - 6.75	10,000
Indiana	1	3.40		Oregon	3	5.00 - 9.00	5,850 ^b
Iowa	9	0.36 - 8.98	52,290	Pennsylvania	1	2.80	
Kansas	3	3.50 - 6.45	30,000 ^b	Rhode Island	25.5% fed tax		
Kentucky	5	2.00 - 6.00	8,000	South Carolina	6	2.50 - 7.00	11,550
Louisiana	3	2.00 - 6.00	50,000 ^b	Utah	6	2.30 - 7.00	3,750 ^b
Maine	4	2.00 - 8.50	16,500 ^b	Vermont	24.0% fed tax		
Maryland	4	2.00 - 4.80	3,000	Virginia	4	2.00 - 5.75	17,000
Massachusetts	1	5.60 ^e		West Virginia	5	3.00 - 6.50	60,000
Michigan	1	4.20 ^f		Wisconsin	4	4.60 - 6.75	112,500
Minnesota	3	5.35 - 7.85	57,710 ^g	District of Columbia	3	5.00 - 9.30 ^m	30,000

Source: Federation of Tax Administrators 2001, except District of Columbia (see note m).

^a In many states, the rate-structure is the same for single filers and married couples filing jointly. Where this is not the case, footnotes indicate the differences.

^b In these states for married couples filing jointly, the tax is twice the liability determined by considering only half the income.

^c For married couples filing jointly, the top Georgia bracket begins at \$10,000.

^d The Hawaii top rate is scheduled to drop to 8.25 percent after 2001.

^e Massachusetts taxes dividend, interest, and net capital gains income at a higher rate than other income.

^f The Michigan rate is scheduled to drop to 4.1 percent in 2002.

^g For married couples filing jointly, the 2001 Minnesota top bracket begins at \$102,030.

^h An administrative body annually sets the Nebraska tax rate applied to federal tax liability.

ⁱ For married couples filing jointly, the 2001 Nebraska top bracket begins at \$46,750.

^j For married couples filing jointly, the 2001 New Jersey top bracket begins at \$150,000.

^k For married couples filing jointly, the New Mexico top bracket starts at a higher level – \$100,000 in 2001.

^l For married couples filing jointly, the 2001 North Carolina top bracket begins at \$100,000.

^m The District's rates are scheduled to drop in stages for 2002, 2003, and 2004 (*District of Columbia Code*, §47-1806.3)

⁴⁹ 1979 data calculated from Penniman, *State Income Taxation*. 1980, table 6; note that Virginia's top bracket in 1979 began at \$12,000.

Table 11. Ceilings and Marginal Tax Rates for Bottom Brackets of State Graduated-rate Individual Income Taxes as of January 1, 2001

First Bracket Ceiling (\$)	Cumulative Number of States	First Bracket Rate (%)	Cumulative Number of States
<1,000	3	< 1.0	6
1,000	7	1.1 - 1.49	7
2,000	10	1.5 - 1.99	10
3,000	14	2.0 - 2.49	20
5,000	21	2.5 - 2.99	24
10,000	29	3.0 - 3.99	28
20,000	33	4.0 - 4.99	30
>20,000	34	> 5.0	34

Exhibit:

First Bracket Ceiling (\$)	
Median	3,575
Mean	6,060
Standard deviation	5,847
Maximum	23,100
First Bracket Rate (%)	
Median	2.00
Mean	2.46
Standard deviation	1.37
Maximum	6.00

Source: Calculated from the Federation of Tax Administrators' information [http://www.taxadmin.org/fta/rate/tax_stru.html].

collect the same amount or more revenue. Partly for this reason, such changes generally have been made infrequently. The high inflation rates experienced in several years in the 1970s and early 1980s, however, drew attention to the fact that failure to adjust bracket widths in line with inflation is a form of tax increase. Workers who receive only cost-of-living pay increases, and thus are no better off in terms of real purchasing power, have their incomes pushed up through the tax brackets with the result that the effective tax rate increases as a result of inflation. The outcome of not adjusting brackets for inflation is known as "bracket creep" and the result is one source of what is referred to as "the inflation tax." As an example, a single taxpayer with Virginia AGI of \$20,800 in 1990 would have taxable income equal to \$17,000,⁵⁰ the dividing line between the 5 percent and 5.75 percent brackets since 1990. A taxpayer in this situation in 1990 would have

⁵⁰ The \$3,000 standard deduction is assumed to be taken, as well as one \$800 personal exemption.

Table 12. Starting Points and Marginal Tax Rates for Top Brackets of State Graduated-rate Individual Income Taxes as of January 1, 2001

Top Bracket Threshold (\$)	Cumulative Number of States	Top Bracket Rate (%)	Cumulative Number of States
5,000	3	3	0
10,000	10	4	0
15,000	10	5	4
20,000	14	6	11
30,000	18	7	22
50,000	22	8	24
75,000	30	9	31
100,000	30	10	32
200,000	34	15	34
> 200,000	34	20	34

Exhibit:

Top-Bracket Threshold (\$)	
Median	30,000
Mean	44,454
Standard deviation	44,156
Maximum	200,000
Minimum	3,000
Top-Bracket Rate (%)	
Median	6.80
Mean	7.14
Standard deviation	1.69
Maximum	12.00
Minimum	4.50

Source: Calculated from Federation of Tax Administrators' information [http://www.taxadmin.org/fta/rate/tax_stru.html].

owed the state \$720 tax, and would have had no income subject to the 5.75 percent marginal rate. If that taxpayer's taxable income rose just in line with inflation, in 2001 it would have been \$28,184.⁵¹ Because Virginia has not increased bracket widths, standard deductions, or personal exemptions since 1990, taxable income for this taxpayer in 2001 would have been \$24,384. About 30 percent of total taxable income (\$7,384) would have been subject to the 5.75 percent marginal rate,⁵² and tax liability would have been \$1,145. Thus an increase in nominal income just sufficient to offset cumulative in-

⁵¹ The cost-of-living adjustment of taxable income between 1990 and 2001 was made using the CPI-based "inflation calculator" provided on the U.S. Bureau of Labor Statistics' website [<http://www.bls.gov>], which shows inflation of 35.5 percent between 1990 and 2001.

⁵² Indexation of the Virginia income tax is considered from various perspectives in an earlier Virginia Issues study, which includes a chapter on how inflation affects tax burdens (Knapp and Grossman, *Virginia Issues: Indexing the Individual Income Tax*. 1981, 8-12.).

flation of 36 percent produced a 59 percent increase in tax liability. Indexing bracket widths, personal exemptions, and standard deductions in line with inflation would have resulted in a \$976 tax liability, an amount higher than the taxpayer's 1990 liability by the same percentage as the increase in nominal income.⁵³ Neither real income nor real tax liability would have been increased. Absent indexation, however, a total inflation tax of \$169 (\$1,145-\$976) was imposed. Of this, about one-third (\$55) resulted from pure bracket creep, that is, subjecting the additional \$7,384 of taxable income to the 5.75 percent rate rather than the 5 percent rate.

To avoid such "unlegislated tax increases," the federal government and seven state governments have indexed their income taxes to provide automatic increases in bracket widths (and other features of their tax structures) in line with percentage changes in the consumer price index (CPI).⁵⁴ For example, under indexation, inflation of 2 percent would cause Virginia's \$3,000 first-bracket ceiling to rise to \$3,060, its second bracket range of \$3,001-\$5,000 to become \$3,061-\$5,100, and its third bracket range of \$5,001-\$17,000 to become \$5,101-\$17,340. If the inflation were 10 percent, the first bracket would rise from \$3,000 to \$3,300, and so on, for the other brackets.

Even relatively small annual inflation rates can lead to significant cumulative changes over time. For example, if the first-bracket current thresholds for the top three Virginia tax brackets had been indexed starting in 1999, the \$3,000 dividing line between the first and second brackets would have increased from \$3,000 in 1998 to \$3,066 in 1999, to \$3,169 in 2000, and to \$3,265 in 2001; similarly, the threshold for the top bracket would have risen from \$17,000 in 1998 to \$18,502 in 2001 (see **Table 13**). The cumulative change in just three years is nearly 9 percent, and these were years of relatively

⁵³ With 1990 as the baseline, indexing to 2001 would have given the following: 2 percent on the first \$4,065; 3 percent on the next \$2,710; 5 percent on the next \$16,260; 5.75 percent on taxable income in excess of \$23,035; single standard deduction equal to \$4,065; and personal exemption equal to \$1,084. Taxable income in the example would then have been \$23,035 in 2001, the top of the 5 percent bracket in that year; thus, as in 1990, the taxpayer would have had no income subject to the 5.75 percent rate.

⁵⁴ They are California, Iowa, Maine, Minnesota, Montana, Oregon, and South Carolina; they also adjust standard deductions and personal exemptions or credits (if any), while three other states (Michigan, Nebraska, and Ohio) index just their personal exemption levels. Because Rhode Island and Vermont tax federal liability, they implicitly index because the federal tax is indexed. Information for 2001, from the Federation of Tax Administrators' website.

low inflation. The 1998 starting point is used here in part because, as noted earlier, that is the base year used in this study for revenue simulations of alternative tax structures. More spectacularly, if the \$3,000 ceiling for the first bracket had been indexed since it was first set in 1919, its 2001 value would have been \$30,763. As a final example, if indexing had been applied since 1972, when the fourth bracket was added, the dividing lines between the brackets would have risen from their 1972 levels of \$3,000, \$5,000, and \$12,000 to \$12,736, \$21,220, and \$50,928, respectively, in 2001. With no changes in marginal tax rates, indexing of bracket widths means less tax revenue for the state than without indexing. Alternatively, failure to adjust bracket widths in line with inflation uses inflation as a backdoor route to a tax increase. Indexation proponents argue it is better for the government to make its case for tax increases than to allow inaction to impose an "inflation tax."

Table 13. Inflation-adjusted Tax Bracket Starting Points, 1998-2001

Tax Rate	1998	1999	2000	2001
3.00%	\$3,000	\$3,066	\$3,169	\$3,265
5.00%	\$5,000	\$5,110	\$5,282	\$5,442
5.75%	\$17,000	\$17,376	\$17,960	\$18,502

Source: Author's calculations based on the changes in the CPI-U.

Level of Rates

In addition to the already noted compression of rate structures, the range of rates also has narrowed in recent years for graduated-rate states, and the squeeze has come from both ends.⁵⁵ Although the 2 percent median bottom rate for 2001 is the same as for 1979, the mean rose over this period from 1.86 percent to 2.46 percent. The median top rate fell over the period from 8 percent to 6.8 percent, while the mean fell from 8.83 percent to 7.14 percent. Not all states have made changes, of course; as noted earlier, the lowest Virginia rate has been 2 percent since 1948 and the top rate has been 5.75 percent since 1972.

There is substantial variation among the states. The cumulative distribution of states by first-bracket rates for 2001 shows rates of 1 percent or less in six states and of 5 percent or higher in four; in ten of the thirty-four graduated-rate states, the first-bracket rate is lower than Virginia's 2 percent (Table 11). With regard to top-bracket rates, it already has been noted that they

⁵⁵ The following information for 2001 is in Tables 7 and 8, above; the 1979 information was calculated from Penniman, *State Income Taxation*. 1980, table 6.

have trended downward. Still, at 5.75 percent, Virginia's top rate is sixth from the bottom in an array going from highest to lowest top rates for 2001 (Tables 10 and 12). The highest top-bracket rate among the states is 12 percent, a little more than double Virginia's rate. Thirty-two of the 34 graduated-rate states have top rates of 10 percent or less.⁵⁶

Deductions and Exemptions

Vertical equity is concerned with the relative effective tax rates for people with different income levels, focusing on how tax burden changes as taxpaying ability changes. The public seems to prefer tax systems in which effective rates rise with income.⁵⁷ Such progressivity usually is achieved via a multi-rate structure, with higher marginal rates applicable to higher slices of income. Nonetheless, a single-rate system can provide a progressive pattern of effective rates. This result is obtained by removing from the statutory tax base, through deductions and/or exemptions, some amount of taxable-source income.⁵⁸ If the amount excluded is constant for any given family size, the excluded amount becomes a smaller percentage of income as income rises. This is illustrated by the hypothetical example in **Table 14**.⁵⁹ The statutory (or nominal) tax rate is a flat 5 percent, and the statutory tax base is money income less \$15,000. For income amounts of \$15,000 or less, the effective tax rate as a percentage of money income is zero. For taxpaying units with money incomes of \$25,000, \$50,000, and \$100,000, the effective rates are 2 percent, 3.5 percent, and 4.25 percent, respectively. Thus, a progressive pattern of effective rates occurs, despite the flat-rate nature of the rate structure. This illustration demonstrates why it is inaccurate to use "graduated-rate" and "progressive" synonymously. Another important implication is that one cannot draw safe conclusions about the burdens imposed by different tax structures by focusing on just the level and

structure of rates. The tax base is also vitally important.⁶⁰

Table 14. Effective Rates of a Flat 5 Percent Tax with an Exclusion of \$15,000

	Money Income Level		
	\$25,000	\$50,000	\$100,000
Exclusion	\$15,000	\$15,000	\$15,000
Taxable net income	\$10,000	\$35,000	\$85,000
Tax	\$500	\$1,750	\$4,250
Effective rate	2.00%	3.50%	4.25%

Source: Author's calculations.

Personal exemptions and standard deductions are considered together for two reasons. First, both are subtractions from adjusted gross income in arriving at taxable income. Second, each is available to all filers at specific dollar amounts per person as a personal exemption, or per return for a given filer type as a standard deduction. The sum of these subtractions from AGI is a tax-free amount, sometimes referred to as either a zero-bracket amount or the threshold of tax liability.

As with other aspects of their income taxes, the states differ widely in terms of the level of deductions and exemptions provided.⁶¹ Not all states allow both deductions and exemptions, and one state allows neither.⁶² Another six allow neither itemized nor standard deductions.⁶³ In two states with some of the highest total tax-free amounts, one offers very large personal exemptions for taxpayer and spouse, together with modest standard deductions, while the other has no personal exemptions but very high standard deductions.⁶⁴ This underscores the fact that the tax-free amount can be set in various ways.

⁵⁶ Note that the tables, and this discussion, pertain to single taxpayers, where there is a difference in the rate structure for single and married returns; the differences are given in footnotes to Table 6.

⁵⁷ Slemrod and Bakija, *Taxing Ourselves: A Citizen's Guide to the Great Debate Over Tax Reform*. 2000, 61-64.

⁵⁸ This exclusion of taxable-source income should not be confused with omitting from the tax base income from certain sources. Exclusion of some taxable-source income can improve vertical equity, whereas omitting certain sources from the tax base is a source of horizontal inequity.

⁵⁹ This is illustrated by Table 2 and the surrounding discussion, even though the focus there is elasticity.

⁶⁰ As discussed later, most states start from the federal income tax to define the state tax base, and most, like Virginia, start from federal AGI, and then specify their own deductions and exemptions.

⁶¹ The following discussion uses information on personal exemptions for 2001 (Federation of Tax Administrators' website) and on itemized and standard deductions for 1999 (Russell, *Individual Income Tax Provisions in the States*. 2001, table 3.); among states allowing some adjustment for family size, personal exemptions are the usual means, but several states allow credits instead.

⁶² Pennsylvania, which allows neither, nonetheless imposes no tax at or below poverty (Brunori, *State Tax Policy: A Political Perspective*. 2001, 95.)

⁶³ The six are Illinois, Indiana, Michigan, New Jersey, Ohio, and West Virginia. Interestingly, this is a contiguous group of states.

⁶⁴ The first is Connecticut, where the exemptions are \$12,000 and \$24,000, and the other is Colorado, where the standard deductions are \$12,000 and \$24,000.

At the bottom of states with some taxpayer exemptions is Wisconsin; its taxpayer exemption for 2001 is \$700 and \$1,400 for a couple (although its dependent exemptions are \$1,400 each), followed by Virginia, with personal exemptions of \$800 per person.⁶⁵ Virginia standard deductions also are relatively small, in comparison with those in states that allow standard deductions, although the Old Dominion is not as close to the bottom of the array as in the case of personal exemptions. This reflects the fact that 1987 Virginia legislation increased the standard deductions to equal the federal level set by the 1986 federal tax reform, but failed to increase the personal exemptions significantly. Virginia's personal exemptions and standard deductions, unchanged in over a decade, have fallen relative to federal levels and average state levels.

Indexing Deductions and Exemptions

The federal individual income tax is indexed to inflation. In addition to increasing bracket widths, as discussed earlier, the federal government also increases personal exemptions and standard deductions each year. A number of states automatically adopt federal levels for personal exemptions and/or standard deductions, which are indexed to inflation, or index their own systems of exemptions and deductions. Indexing occurs automatically in the two states that use federal tax liability for their tax base. Because personal exemptions and standard deductions jointly determine the tax-free amount, their periodic adjustment is important. The logic of providing a tax-free amount is that ability to pay taxes does not commence with the first dollar of income. Some amount is needed just to subsist, and that amount increases with inflation. For this reason, automatic indexation is a reasonable way to provide for the adjustment. Indexation of standard deduction and personal exemption amounts works exactly the same as indexation of bracket widths that was illustrated earlier.

Recommendations

States should set the values of personal exemptions and standard deductions so as to remove from taxation amounts they believe do not represent taxpaying abil-

ity.⁶⁶ A reasonable approach that has been adopted by the federal government and by several states is the removal of poverty level income from the tax base. Because poverty level rises with family size, the tax-free amounts also should rise with family size. However, the increase in the tax-free amount should not be proportional to family size, because the cost-of-living does not rise proportionately with increases in family size. Poverty thresholds determined by the federal government reflect this. (See Table 3, panel 1 for the 1998 thresholds.) For example, the \$10,634 poverty threshold for two people is 1.3 times the \$8,316 threshold for one person, and the \$21,780 threshold for six is 2.6 times that for one person.

Once a tax-free level is set, that level and the tax brackets should be indexed. The alternative is periodic statutory change. In Virginia, such changes have been few and far between. The result, shown in panel 2 of Table 3, is that the Virginia tax-free amounts for taxpayers under age 62, for all family sizes, range from 45 percent to 62 percent of the 1998 poverty thresholds. Between 1998 and 2001, the Census Bureau poverty thresholds were adjusted upward by over 8 percent to compensate for inflation (see **Table 15**).⁶⁷ Thus, continued inaction on changing personal exemptions and standard deductions brings more poverty income into the Virginia tax base each year.⁶⁸

⁶⁶ In concept, the first dollars of income should be left untaxed. Personal exemptions and standard deductions that reduce taxable income before tax rates are applied actually have the effect of removing the *last* dollars of income from the base, rather than the more logical *first* dollars. A credit can be structured to, in effect, remove first dollars from taxation. If the nominal tax rate is the same at all levels of taxable income, the difference between an exemption and a credit is nil, but it becomes larger the greater the spread in statutory rates. See Bowman, "A Framework for Evaluating Taxes: Terminology and Criteria." 2001a, for further discussion of this matter, including consideration of personal credits for the Virginia tax.

⁶⁷ Separate thresholds based on age are reported for households with one or two members, and they are lower for the elderly than for the non-elderly. For example, for a single person in 2001, thresholds are \$8,494 and \$9,214. For years before 2001, thresholds that were not age-specific were reported by the Census Bureau and used in this study; these were close to, but below, those for the non-elderly. For 2001, only age-specific figures are provided for households of one or two people, so those for persons under age 65 are used here. The apparent larger increase in the poverty thresholds for those small households results from this loss of comparability in the data.

⁶⁸ The low-income credit, discussed earlier, helps to reduce this result, but it goes to zero when income rises above the poverty threshold (see Appendix A).

⁶⁵ This comparison omits seven states that use personal credits, rather than exemptions; credit comparisons are more complex because of the importance of marginal tax rates and bracket widths.

Table 15. Poverty Thresholds, 1998 and 2001

Year	Number of Persons in Family					
	One	Two	Three	Four	Five	Six
1998	\$8,316	\$10,634	\$13,120	\$16,530	\$19,453	\$21,780
2001	\$9,214	\$11,859	\$14,255	\$17,960	\$21,135	\$23,664

Source: U.S. Census Bureau: <http://www.census.gov/ftp/pub/hhes/poverty/threshld.html>

As explained earlier, revenue neutrality in this study means matching the estimated yield of the alternative income tax structure to the actual tax year 1998 yield of the existing tax. To remove 1998 poverty level income from the tax base, personal exemptions were set at \$2,500 each and standard deductions at \$3,500 for a single person and \$7,000 for a married couple filing jointly. These amounts generally achieve that objective, as shown by **Table 16**.

For reasons discussed in connection with the marriage penalty, however, the proposed changes in exemptions and deductions remove less than poverty income for a single person and more than poverty income for married couples filing jointly. Adjusting the suggested amounts for inflation between 1998 and 2001,⁶⁹ the \$2,500 personal exemptions would have to be \$2,721 for 2001, while the standard deductions would have to be increased from \$3,500 to \$3,809 for a single person and from \$7,000 to \$7,618 for a married couple. These amounts are below federal levels for 2001, but well above actual 2001 levels for Virginia (see **Table 17**).

For reasons discussed in connection with horizontal equity, the additional exemptions based on age and blindness should be eliminated. It is important to note that this elimination, combined with the recommended increases in personal exemptions, would not increase taxable income for those 65 and over. Indeed, one \$2,500 exemption would remove more income from the tax base than two personal exemptions at the current \$800 level. If the \$2,500 level appropriate for 1998 were indexed (to

\$2,721 for 2001), the single exemption per taxpayer and spouse would exceed their current double exemptions even more. Partly for this reason, elimination of the additional exemptions should be done at the same time that the exemption level is increased.

SIMPLICITY

Standards

In addition to horizontal and vertical equity, another major criterion for a good tax is simplicity. All else equal, a tax should be as easy to comply with and to administer as possible; otherwise, resources are wasted in making the tax system work. Compliance costs are considered to be those incurred by taxpayers, while administrative costs are those borne by the tax agency. Often, legislatures focus on administrative costs, because they affect claims on available budget resources, but lawmakers pay less attention to compliance costs, which fall on the private sector. From the standpoint of society both are important. When more of society's scarce resources (including taxpayers' time) are absorbed by the tax system, fewer other things can be done. Thus, simplicity is concerned with efficiency. In addition, a more complicated system makes errors more likely, which can reduce equity across taxpayers. However, the standards of equity and simplicity at times conflict, and choices must be made between them.

Table 16. Proposed Tax-free Amounts Relative to Poverty Thresholds, 1998

	Number of Persons in Family					
	One	Two	Three	Four	Five	Six
Tax-free amount	\$6,000	\$12,000	\$14,500	\$17,000	\$19,500	\$22,000
Ratio of tax-free amount to poverty threshold	72%	113%	111%	103%	100%	101%

Source: Author's calculations based on information in Table 15.

⁶⁹ The inflation calculator on the Bureau of Labor Statistics website was used.

Table 17. Personal Exemption and Standard Deduction Amounts for 2001

	Exemptions (\$)	Single Deduction (\$)	Married Deduction (\$)
Virginia, actual	800	3,000	5,000
Virginia, proposed	2,721	3,809	7,618
Federal	2,900	4,550	7,600

Source: Actual levels are shown on state and federal tax forms for 2001; proposed Virginia levels are based on author's calculations, including indexation after 1998 (see text).

Most states' income taxes now reference the federal code to provide the starting point for the state tax base. This provides a degree of federal-state tax conformity. Conformity can reduce both administrative and compliance costs. Virtually complete conformity is said to exist if the state base is federal tax liability, because with this base the state accepts federal exemptions, deductions, and rate structure.⁷⁰ This would seem to provide maximum gains in simplicity for taxpayers and administrators, but it comes at the cost of less state control over tax policy. Substantial conformity exists if the state starts from federal taxable income (TI), which means that federal exemptions and deductions, but not rate structure, are incorporated into the determination of state tax liabilities. Moderate conformity exists if the state starting point is federal adjusted gross income (AGI). From this point, states define their own exemptions and deductions, as well as their rate structures. Finally, a state that defines its income tax base without reference to the federal code is said not to conform to the federal base definition.

Current Conditions

Virginia uses federal AGI as its tax base. This allows the state income tax to conform moderately to the federal system while still allowing Virginia a great deal of control over tax policy. There are several points of nonconformity, each with some implications for equity as well as simplicity. Virginia sets lower personal exemption and standard deduction levels, and it also removes from the state tax base the amount of Social Security benefits taxable under federal law. The former has resulted in diminished vertical equity, and the latter reduces horizontal equity. In addition, Virginia allows husbands and wives who file joint federal returns to make a spouse tax adjustment, if each has income, to avoid the marriage penalty. However, this reduces horizontal equity between married couples with two earners compared to those with one earner. Still, the degree of conformity is substantial, including not only the AGI

⁷⁰ This sounds like complete conformity, not just virtually complete; however, states make some adjustments for federal and state-local securities, at a minimum.

starting point but also itemized deductions that are the same as used by the federal government.⁷¹ Taxpayers thus are able to save time by copying numbers from their federal returns and putting them in their state income tax returns. This degree of conformity makes state use of IRS computer tapes advantageous in checking both whether federal filers from Virginia are filing state returns and whether key figures match up in the two sets of returns.

Comparisons

Currently, twenty-five states, including Virginia, use federal AGI as their tax base (**Table 18**). Nine states use federal taxable income as their base, and just two states use federal liability.⁷² Over time, federal conformity has increased, and AGI has become the dominant choice of the states. Compared to two decades earlier, the number of states linking to the federal code in 2001 is larger (36 compared to 32), as is the number selecting AGI as their starting point (25 compared to 21).⁷³

Recommendations

As a general rule, state conformity to federal tax provisions can reduce both compliance and administrative burdens. However, there are significant trade-offs between simplicity and the other standards for a good tax. Sections of Virginia's tax code that depart from the federal tax often are designed to create a more equitable situation. Such is the case with two-earner married couples who are allowed to claim the spouse tax adjustment. Some departures do not increase equity, and eliminating them could simplify the tax code and improve equity. One example is including Social Security

⁷¹ An exception is that the federal deduction of state income tax payments must be added back to the state base.

⁷² In addition, North Dakota, shown in Table 19 as starting from taxable income, allows the option of paying a percentage of federal tax liability, without deductibility of the federal tax (Federation of Tax Administrators [http://taxadmin.org/fta/rate/ind_inc.html]).

⁷³ The earlier time period is 1979, as reported by Penniman, *State Income Taxation*. 1980, table 7.

Table 18. Tax Base Definition for Broad-based State Individual Income Taxes, Relative to Federal Income Tax Definitions, 2001

	Federal Income Tax Definition				
	AGI	Taxable Income	Tax Liability	Not Used	No State Tax
Arizona	Colorado	Rhode Island	Alabama	Alaska	
California	Hawaii	Vermont	Arkansas	Florida	
Connecticut	Idaho		Mississippi	Nevada	
Delaware	Minnesota		New Jersey	New Hampshire	
Georgia	North Carolina		Pennsylvania	South Dakota	
Illinois	North Dakota ^a			Tennessee	
Indiana	Oregon			Texas	
Iowa	South Carolina			Washington	
Kansas	Utah			Wyoming	
Kentucky					
Louisiana					
Maine					
Maryland					
Massachusetts					
Michigan					
Missouri					
Montana					
Nebraska					
New Mexico					
New York					
Ohio					
Oklahoma					
Virginia					
West Virginia					
Wisconsin					
Total	25	9	2	5	9

Source: Federation of Tax Administrators' Web site (<http://www.taxadmin.org>).

^a North Dakota uses federal tax liability as the base for short-form filers (*North Dakota Code*, chapter 57-38).

income in the tax base. Similarly, accepting the federal level of personal exemptions and standard deductions would have the advantage of making these amounts more appropriate now and in the future, as the federal government indexes them. On the other hand, the federal standard deduction for a married couple is less than double that for a single person, so an element of the marriage penalty would be added by such conformity. This study identifies personal exemption and standard deduction levels that remove poverty income from the tax base, except for single filers, an exception that underscores the trade-offs among standards. Whatever amounts are adopted by Virginia should, like the federal amounts, be indexed.

AVOIDANCE OF ADVERSE ECONOMIC INCENTIVES

Standards

A tax is said to be neutral if it does not directly influence economic choices. Neutrality is desirable because

it leaves people free to make the choices that best suit them without having those preferences altered by tax considerations. It is important to stress that this is different from the *revenue*-neutrality standard noted elsewhere in this study. Basically, neutrality as used here requires a tax from which there is no escape, because as long as some change in behavior can affect tax liability, the tax provides an incentive to alter behavior. While economists believe that no feasible tax can fully meet the objective of neutrality, some taxes are better than others. The most neutral tax is said to be a head tax that imposes the same liability on each person. However, such a tax fails miserably on equity grounds.

A sales tax that excludes certain consumption goods and services from its base creates incentives that favor those excluded purchases. By comparison, an income tax that establishes tax liability on the basis of income, rather than the uses to which that income is put, does not provide incentives favoring the purchase of cer-

tain things over others. Tax preferences, such as deductibility of certain outlays or exclusion of income from specified sources, depart from such a tax and provide incentives to alter behavior. Even a broad income tax, however, may provide work disincentives because earnings are taxed while the value of leisure time is not.

As one author put it, “The income tax characteristic that determines the magnitude of these incentives is the marginal tax rate, that is, the tax rate that applies to the last dollar earned.”⁷⁴ Federal marginal rates have been reduced over time, partly because of incentive concerns; the top rate reached its lowest level with adoption of the 1986 Tax Reform Act, but even after addition of some higher bracket rates in the 1990s, the top marginal rate remains lower than between World War II and the mid-1980s. Many states that had high marginal tax rates prior to the 1986 federal change cut their rates afterward, often dramatically, thus bringing down the state average top marginal rate.

High marginal tax rates might affect many sorts of decisions, including where individuals choose to live, where businesses choose to locate and create jobs, and individuals’ decisions to join the workforce or, if already holding a job, to work additional hours. Because the concern in each case is that decisions might be affected by tax considerations, all these cases deal with neutrality. Clearly, higher taxes tend to affect these sorts of decisions; the real question is the magnitude of the effect. This will depend upon other considerations that also bear on the decisions, and on what the options are. The smaller the geographic area of the taxing jurisdiction and the greater the range of tax differences among competing jurisdictions, all else equal, the greater the effect of taxes is likely to be. Thus, tax differences among states are likely to be less important than differences among localities within a metropolitan area,⁷⁵ but more important than differences among nations. Of course, options vary for different people and businesses; for example, a convenience store has fewer location options than a wholesale distribution center. Residential and business location options are being increased by modern technologies, making it possible to conduct various sorts of activities from remote locations via the

⁷⁴ Fisher, *State and Local Public Finance*. 1996, 424; emphases in the original are omitted. Reference is to incentives or disincentives bearing on such decisions as whether to join the workforce, to work an additional hour, to consume or save, and to make expenditures favored by deductions.

⁷⁵ In the case of population concentrations near state borders, interstate tax differences become intra-metropolitan differences.

Internet. Logically, the importance of tax considerations is likely to increase in this environment.

Conclusions from the empirical literature are mixed, in part because the tax effects are not uniform across all settings and decision units. Still, the more recent literature has found significant negative effects of taxes. In a recent survey, Ladd states, “researchers made tremendous progress during the 1980s in determining the impacts of taxes on economic activity. This new research renders obsolete the old conventional wisdom among economists that taxes have negligible impacts on interstate location decisions. Indeed, taxes appear to have quite large effects.”⁷⁶ Bartik’s 1991 survey of the literature on state and local taxation was important in scuttling the old view. It reports that most studies found some statistically significant, negative tax influence on business location decisions.⁷⁷ Importantly, however, Bartik groups the studies based on methodological features and, as Ladd observes, shows that “more sophisticated studies tend to yield larger estimated responses than less sophisticated studies.”⁷⁸ Taxes tend to have larger effects within metropolitan areas than across states,⁷⁹ but recent studies report important negative relationships between taxes and economic growth even at the national level.⁸⁰ Slemrod and Bakija provide the following perspective: “Some tax changes that are ‘good for the economy’ eliminate unnecessary and misguided features that are violations of neutral tax treatment of economic activities. In other cases, the economic gains are achieved by exploiting the trade-off with progressivity, by loosening the link between tax liability and economic success.”⁸¹

⁷⁶ Ladd, “Effects of Taxes on Economic Activity.” 1998, 95.

⁷⁷ Bartik, *Who Benefits from State and Local Economic Development Policies?* 1991, 40-41; groups studies into five categories, with anywhere from 10 to 57 studies in each category, and reports that negative and significant tax effects in anywhere from 57 percent to 92 percent of the studies in the various categories.

⁷⁸ Ladd, “Effect of Taxes on Economic Activity.” 1998, 94. For the more than 100 studies in the survey, on average a 10 percent difference in state-local taxes (all else unchanged, including expenditures for services) was associated with a 2.5 percent difference in the opposite direction in business activity, but for the most sophisticated studies considered separately, the effect of taxes was twice as great.

⁷⁹ Inman, “Comment.” 1998, 102.

⁸⁰ Engen and Skinner, “Taxation and Economic Growth.” 1996, 635.

⁸¹ Slemrod and Bakija, *Taxing Ourselves: A Citizen’s Guide to the Great Debate Over Tax Reform*. 2000, 132. The second chapter (“Taxes and Economic Prosperity,” 87-132) explores the effect of taxes on economic performance, with an emphasis on national-level data.

In addition to the efficiency effects of high marginal tax rates, there also are equity concerns. The Slemrod-Bakija quote highlights the trade-off between tax neutrality and progressivity of taxes. High marginal rates also can increase the so-called marriage penalty. The question of the level of *marginal* tax rates is not the same as that of *average* rates. As an example, the federal Tax Reform Act of 1986 cut marginal tax rates substantially, but was designed to be revenue-neutral. Another way of stating this is that the average tax rate, calculated as total tax revenue as a percentage of total income, was to be unchanged. The marginal tax rate, by comparison, is the rate that applies to the last (or marginal) dollar of income received. Marginal tax rates can be reduced while holding tax yield constant by broadening the statutory tax base to make it closer to total income. Lower marginal tax rates are thought to improve tax neutrality, while base broadening can improve horizontal equity.

Another issue related to the economic effects of taxes is how the revenue is used. Higher taxes, by themselves, tend to have a negative effect; people would rather pay less than more, all else equal. Additional spending for certain services, such as education and transportation infrastructure, may offset, at least to some extent, higher taxes by promoting economic growth. A 1985 study of the effect of state-local taxes using states as the units of observation found that “tax increases retarded economic growth when the revenues were used to finance transfer payments. However, when tax increases were used to finance other public services, such as education or infrastructure, they made a state more attractive to both firms and households.”⁸² A later study using data for 28 metropolitan areas found “that taxes are negatively related to total employment and education spending is positively related to total employment.”⁸³ Similarly, a study of state-level data that considered growth rates of new enterprises (excluding new branches) and of new establishments (including new branches), rather than employment, found that higher taxes, whether personal or corporate, were associated with lower growth, while infrastructure spending increases had a positive effect on growth.⁸⁴

⁸² Ladd, “Effects of Taxes on Economic Activity,” 1998, 92; summarizing findings of a 1985 study by L. Jay Helms.

⁸³ Dalenberg and Partridge, “The Effects of Taxes, Expenditures, and Public Infrastructure,” 1995, 617.

⁸⁴ Goss, “The Impact of Infrastructure Spending on New Business Formation,” 1994.

Current Conditions

For Virginia, the relevance of the literature on the economic effects of taxes is more as a caveat against moving toward a more steeply graduated tax structure than as an admonition to reduce income tax rates. The state’s top marginal rate has been 5.75 percent since 1972, which is not high by comparison to most other states. The 3.75 percentage-point difference between the highest and lowest rates is substantial. This is not a factor in what commonly is called the marriage penalty. Rather than adding one spouse’s income on top of the other’s, Virginia historically provided a combined filing option that let each spouse have his or her first \$3,000 of taxable income taxes at the 2 percent rate, and so on. Starting with tax year 2000, this was converted to a “spouse tax adjustment” taken on joint returns to provide the same end result. However, this combined filing option together with the spread in marginal tax rates creates an inequity between married couples with two earners and those with only one earner. For two couples with the same total income and same family size, the tax liability is higher for the one-earner family. This inequity would be worse if the tax brackets were wider.

Comparisons

Virginia’s 5.75 percent top marginal rate is below the national average for states with graduated-rate income taxes, although the \$17,000 threshold for this rate is relatively low (Tables 10 and 12). The top marginal rate is neither the highest nor the lowest among the contiguous states for 2001, as shown in **Table 19**. Another measure of the level of an income tax is the amount of revenue as a percentage of state personal income, as defined by the Bureau of Economic Analysis, also shown in Table 19 for 2000.⁸⁵ By this measure, Virginia is somewhat above the average for all states.

Recommendations

Income tax reform in Virginia should avoid significant increases in the top marginal rate that would create a larger spread between high and low marginal rates. Indeed, the state may wish to decrease the current 3.75

⁸⁵ Census Bureau website [<http://www.census.gov/govs/statetax/0000.html>]. The figures for 2000 express fiscal 2000 tax revenue as a percentage of calendar 1999 personal income. The average for all states with income taxes is 3.1 percent. The most recent information for the District of Columbia, which the Census Bureau does not list among the states, is for one year earlier [<http://www.census.gov/govs/estimate/9909dc.html>].

Table 19. Two Measures of Broad-based Income Tax Levels, Virginia and Contiguous States

	DC	KY	MD	NC	TN ^a	VA	WV
Top Marginal Rate, 2001	9.30%	6.00%	4.80%	7.75%	...	5.75%	6.50%
Ratio of Tax to Personal Income, 2000	4.80%	2.90%	2.80%	3.50%	...	3.40%	2.60%

Source: Rates are from Table 10 and ratios are from the Census Bureau [<http://www.census.gov/govs/statetax/0000.html> and <http://www.census.gov/govs/estimate/9909dc.html>]; also, see text.

^a Tennessee does not have a broad individual income tax.

percentage-point spread. The spread is important for tax neutrality reasons, because large differences in marginal tax rates create adverse incentives to alter behavior. They also diminish horizontal equity between one- and two-earner married couples. Additionally, a high top marginal tax rate tends to discourage business location and job creation. However, some offset to this consideration is suggested by two facts. First, many other states, including several of Virginia's neighbors, have higher top marginal rates than Virginia's 5.75 percent. Second, although both Virginia's reliance on the individual income tax and the level of the tax in

relation to personal income are relatively high, Virginia nevertheless is a low-tax state. This is because other taxes, which generally rate worse against standard tax principles, are low in comparison to average levels in other states. An income tax restructured to correct current defects, as recommended in this study, should be capable of generating a larger share of state revenue, if state policymakers wish it to do so. A restructured tax can accomplish this without great harm to economic development so long as it continues to be part of a low overall tax load and government services.

POLICY ALTERNATIVES: CONSIDERATION OF SPECIFIC OPTIONS

INTRODUCTION

A number of suggestions for changing the Virginia income tax already have been made in this issue paper. This section moves to consideration of specific alternative income tax rate structures. To focus on the policy aspects of tax reform, however, it is important to hold revenue yield constant. Accordingly, reasonably reliable estimates of tax collections under the alternatives are needed. In this endeavor, the assistance of the Office of Fiscal Research in the Virginia Department of Taxation was indispensable.⁸⁶ Simulations used the Department of Taxation's computer database of tax returns for 1998, the most recent available at the time. Statutory changes after 1998 that were in place were programmed in to reflect current tax provisions as of 2000. The changes called for in each of the specific options then were programmed to estimate the revenue consequences in the aggregate, and by type of filer. For each alternative structure considered, the intent was revenue neutrality. That is, each alternative was to produce aggregate 1998 tax liability essentially equal to the \$5.3 billion collected for that year.⁸⁷

Although a number of alternative rate structures were simulated, certain tax base changes were common to all, except when noted to the contrary. Specifically, personal exemptions were set at \$2,500 each, and standard deductions were set at \$3,500 and \$7,000 for singles and married couples, respectively. This combination generally removes 1998 poverty level income from

the state's tax base, as shown below. Further, the additional exemptions for the elderly and the blind were eliminated. These features are compared to the current tax in **Table 20**. The Department of Taxation simulation indicates that these base changes, combined with the current rate structure, would reduce revenue by \$217 million, which is about 4.1 percent of the actual tax year 1998 aggregate net liability of \$5,319 million. Because the current rate structure is quite dated and in need of change, however, this estimate serves only as a means of getting at the revenue implications of the base changes, independent of whatever rate changes might be made.

As a starting point for the simulations, the intent was to identify some broad policy alternatives encompassing the extremes. The number of possible alternatives truly is limitless. Much of the concern is with equity, but there can be no scientific determination of what is most equitable. Instead the selection must be based on judgment. The initial simulations were made without removing the age-based preferences: additional personal exemptions for those 65 and over, deductions of \$6,000 for persons 62-64 and \$12,000 for persons 65 and over, and complete exemption of Social Security benefits. For this reason, the early simulations reflect a narrower tax base than the alternative used for later computer runs. These initial simulations are not treated at length in this study, but are noted because they give an idea of the rather extreme differences that can exist among revenue-neutral rate structures. At one extreme was a flat rate of 5.55 percent, and at the other was a structure with eleven brackets and marginal rates ranging from 2 percent to 12 percent. For the latter, each of the first ten brackets was \$10,000 wide; rates started at 2 percent and rose in 1 percentage-point steps to 12 percent on amounts in excess of \$100,000.

The next round of options still included very different tax structures, but the graduated-rate options were less steeply graduated, given the trends among state income taxes over the last fifteen years and other considerations discussed earlier in this study. Seven basic structures were selected. Five employed all base changes summarized in Table 20, and two substituted per-

⁸⁶ Simulations were run for the author in 2000, during his work with the Commission on Virginia's State and Local Tax Structure for the 21st Century. Edward P. Harper, then Senior Economist in the Fiscal Research Office, did the simulations.

⁸⁷ To facilitate this, the author was provided with spreadsheet data on the amount of taxable income resulting from the base changes described below and summarized in Table 10. The information was provided in bands of taxable income \$5,000 wide except for the first (up to \$10,000) and last (above \$175,000). This information was used to determine breaking points between tax brackets for each of the several multiple-rate structures considered. Once details of an option were determined in this manner, Mr. Harper provided a full computer simulation.

Table 20. Key Features of Tax Base: Current Virginia Individual Income Tax Compared to Base Used for Alternative Income Tax Structures

Feature	Current Tax Structure	Alternative Structures ^a
Standard deductions		
Single	\$3,000	\$3,500
Married	\$5,000	\$7,000
Personal exemptions		
Natural persons	\$800	\$2,500
Old age/blindness	\$800	Zero
Other age-based preferences		
Deduction, if age 62-64 years	\$6,000	Zero
Deduction if age 65 and over	\$12,000	Zero
Social Security benefits ^b	Fully excluded	Taxable as for federal tax
Tax-free amount (except Social Security ^b)		
One person, under 62 years	\$3,800	\$6,000
One person, 62-64 years	\$9,800	\$6,000
One person, 65 years and over	\$16,600	\$6,000
Two people, both under 62 years	\$6,600	\$12,000
Two people, both 62-64 years	\$18,600	\$12,000
Two people, both 65 years and over	\$32,200	\$12,000
Four people, all under 62 years	\$8,200	\$17,000
Four people, two 62-64 years	\$20,200	\$17,000
Four people, two 65 and over	\$33,800	\$17,000

Source: Virginia tax code and author's suggested alternatives.

^a Amounts set for tax year 1998; see text.

^b Federal law treats pensions under Social Security Act and Railroad Retirement Act in the same manner, and current Virginia law removes both from federal AGI in arriving at Virginia AGI.

sonal credits for personal exemptions. After first describing each of the options, some of their implications are discussed.

SEVEN BASIC OPTIONS

Features

Features of the seven options are summarized in **Table 21**, arrayed from the least to the most progressive rate structure. The personal credits (in the second column) are equivalent to the \$2,500 exemption times the tax rate in the initial bracket, and thus have the effect of taking that portion of tax-free income off the bottom, rather than off the top. For the single-rate option, there is no difference between using an exemption and a credit, but for the multiple-rate options, credits increase revenue yield for a given set of tax brackets. The options are:

- Option 1 – Single rate: 5.3 percent, using either a \$2,500 personal exemption or a \$132.50 personal credit;
- Option 2 – Two rates: 5 percent and 6 percent, with the break between them at \$50,000;

- Option 3 – Two rates: 5 percent and 5.75%, with a break between them at \$50,000 and a personal credit of \$125 instead of a personal exemption;
- Option 4 – Modest graduation, with three rates: 5 percent, 5.5 percent, and 6 percent, the last beginning at \$65,000 of taxable income;
- Option 5 – Modest graduation, with three rates: 5 percent, 5.5 percent, and 6 percent, the last beginning at \$125,000 of taxable income and a personal credit of \$125 instead of a personal exemption;
- Option 6 – Increased graduation, but still with only three rates: 4 percent, 6 percent, and 8 percent, the last beginning at \$70,000; and
- Option 7 – Steeper graduation, using five rates: 3 percent, 5 percent, 6.5 percent, 8 percent, and 9.5 percent, the last beginning at \$80,000.

Assessing the Options

Because all options would raise essentially the same revenue, consideration of them can focus on their other attributes. There are some trade-offs to be weighed, principally between vertical equity and horizontal eq-

Table 21. Five Illustrative Rate Structures Providing Essential Revenue Neutrality Using Alternative Base with Increased Tax-free Amounts and No Age-based Preferences

Option	Taxable Income Brackets and Marginal Rates	
	With \$2,500 Personal Exemption	With Equivalent Personal Credit ^a
1	Single rate, 5.3%	Single rate, 5.3%
2	5% on first \$50,000 6% above \$50,000	
3		5% on first \$50,000 5.75% above \$50,000
4	5% on first \$35,000 5.5% on next \$30,000 6% above \$65,000	
5		5% on first \$75,000 5.5% on next \$50,000 6% above \$125,000
6	4% on first \$30,000 6% on next \$40,000 8% above \$70,000	
7	3% on first \$20,000 5% on next \$20,000 6.5% on next \$20,000 8% on next \$20,000 9.5% above \$80,000	

Source: Author's calculations, based on simulation data from Department of Taxation.

Note: Revenue yields are estimated to be within about 1.5 percent of 1998 aggregate liability. For modified base features, see Table 20 and text.

^a Taxable income amounts are increased by adding the \$2,500 exemption back; the credit amount that is equivalent to a \$2,500 exemption varies with the initial tax rate: \$132.50 for the 5.3 percent option 1 ($\$2,500 * 0.53 = \132.50); \$125 for the 5 percent initial rate of Options 3 and 5.

uity. Among the vertical equity concerns is the desirability of taking poverty level income out of the tax base to the maximum extent possible, and this idea guided the proposed changes in personal exemption and standard deduction amounts on which all the options are based. Horizontal equity concerns prompted removing age-based preferences from the proposed tax base used in estimating all the options presented here. Consideration of those for whom tax liability would increase may necessitate phasing in the changes, which is discussed below. Horizontal equity also is a concern in the treatment of married couples with different portions of income contributed by the two spouses, as discussed more fully below. In this sense, horizontal equity overlaps to some extent with neutrality concerns. Another aspect of neutrality relates to taxpayer location decisions. If tax rates on high-income taxpayers are raised, there is the possibility that a significant num-

ber will choose to avoid the tax by moving away from Virginia. Always present, this concern is likely to be of greater validity in the future as modern technology makes it possible for many people to live and work essentially where they choose. Without specifically noting changes brought about by computer technology and the Internet, Ladd suggests that "increased spatial mobility of firms and smaller location-specific differentials in other determinants of location" will increase the effect of taxes on location decisions.⁸⁸ Flexibility as to place of work may be most pronounced for high-income people. This prospect works against tax structures incorporating very high marginal tax rates.

Effective Rates by Family Size

Effective tax rates in **Table 22** provide some insight into similarities and differences of the options (see Table 21; in addition, for purposes of comparison the current tax is included, but the figures for the current tax are for people under 62 years of age). Rounding out the nine is a structure using the tax brackets and rates of the current Virginia individual income tax, but applying them to the proposed alternative definition of the tax base (see Table 20). This combination is included to show the effect of the base changes separate from the rate changes, and is not a revenue-neutral option. For each of the nine structures, effective rates are shown for three family sizes (one, two, and four members) at seven levels of AGI, giving a total of 189 effective rates.

Effective rates express tax liability as a percentage of AGI. Adjusted gross income is the broadest measure of income encountered in dealing with the state income tax. A broader measure, such as personal income, might be preferred for some reasons, but AGI probably is more meaningful to most taxpayers, and it does permit showing the effects of different subsequent adjustments in arriving at taxable income. The comparisons in Table 22 can aid in understanding the various tax revision options, but some caveats are in order:

- These are illustrative, hypothetical cases, and are not intended to be representative of all Virginia taxpayers.
- Figures for the current tax apply only to taxpayers under age 62, a restriction that removes age preferences from consideration; the distinction is not relevant for the alternatives, which do not include the preferences.

⁸⁸ Ladd, "Effects of Taxes on Economic Activity," 1998, 97.

Table 22. Effective Tax Rates Under Current Tax, Plus Current Rates and Seven Options with Alternative Base: Selected AGI Levels for Selected Family Sizes

Adjusted Gross Income (\$)	Effective Rate (%)					
	Family Size ^a			Family Size ^a		
	One	Two	Four	One	Two	Four
	Current Tax: ^b Rates of 2%, 3%, 5%, and 5.75%			Current Tax: ^b Rates of 2%, 3%, 5%, and 5.75% with Alternative Base ^d		
15,000	2.87	1.93	0.00 ^c	2.13	0.40	0.00
25,000	3.85	3.20	2.84	3.34	2.08	1.08
50,000	4.80	4.48	4.29	4.55	3.86	3.28
80,000	5.16	4.95	4.84	5.00	4.57	4.21
120,000	5.35	5.22	5.14	5.25	4.96	4.72
200,000	5.51	5.43	5.39	5.45	5.28	5.13
500,000	5.65	5.62	5.60	5.63	5.56	5.50
	Option 1: ^e Rate 5.3%			Option 2: ^e Rates of 5% and 6%		
15,000	3.18	1.06	0.00	3.00	1.00	0.00
25,000	4.03	2.76	1.70	3.80	2.60	1.60
50,000	4.66	4.03	3.50	4.40	3.80	3.30
80,000	4.90	4.51	4.17	4.93	4.48	4.10
120,000	5.04	4.77	4.55	5.28	4.98	4.73
200,000	5.14	4.98	4.85	5.57	5.39	5.24
500,000	5.24	5.17	5.12	5.83	5.76	5.70
	Option 3: ^f Rates of 5% and 5.75%			Option 4: ^e Rates of 5%, 5.5% and 6%		
15,000	3.00	1.00	0.00	3.00	1.00	0.00
25,000	3.80	2.60	1.60	3.80	2.60	1.60
50,000	4.40	3.80	3.30	4.49	3.83	3.30
80,000	4.87	4.47	4.15	4.93	4.48	4.11
120,000	5.17	4.89	4.69	5.28	4.98	4.73
200,000	5.40	5.24	5.11	5.57	5.39	5.24
500,000	5.61	5.54	5.49	5.83	5.76	5.70
	Option 5: ^f Rates of 5%, 5.5% and 6%			Option 6: ^e Rates of 4%, 6%, and 8%		
15,000	3.00	1.00	0.00	2.40	0.80	0.00
25,000	3.80	2.60	1.60	3.04	2.08	1.28
50,000	4.40	3.80	3.30	4.08	3.36	2.76
80,000	4.63	4.25	3.94	4.90	4.35	3.98
120,000	4.92	4.66	4.45	5.93	5.53	5.20
200,000	5.33	5.17	5.04	6.76	6.52	6.32
500,000	5.73	5.67	5.62	7.50	7.41	7.33
	Option 7: ^e Rates of 3%, 5%, 6.5%, 8%, and 9.5%					
15,000	1.80	0.60	0.00			
25,000	2.28	1.56	0.96			
50,000	3.72	3.00	2.50			
80,000	5.03	4.43	3.93			
120,000	6.44	5.97	5.57			
200,000	7.67	7.38	7.14			
500,000	8.77	8.65	8.56			

Source: Author's calculations.

^a Families of two or four are assumed to include a married couple.^b Current tax considers only non-elderly taxpayers, and thus ignores age-based preferences.^c Before taking the CLI, tax liability for this below-poverty level filer would have been 1.4 percent.^d Alternative tax base includes increased standard deductions and personal exemptions, and no preferences for age or blindness, see Table 20.^e Options 1, 2, 4, 6 and 7 use \$2,500 personal exemptions. Options 3 and 5 use credits (see Table 21).^f Options 3 and 5 use credits instead of personal exemptions (see Table 21).

- Itemized deductions are ignored because they vary substantially across taxpayers; their use here would not provide a uniform tax base. Therefore, only standard deductions are reflected in Table 22. It is noted, however, that the overwhelming majority of high-income filers itemize while a similar percentage at the lower end of the income scale takes the standard deduction.⁸⁹ This means that tax liabilities for high-income filers will not be as high as shown under the restrictive assumption used here, and that part of any increase in state tax is offset by federal deductibility.
- For families of two or four, it is assumed that two members are husband and wife, an assumption that is important for the current tax due to the sizes of its standard deductions.
- For married couples, it is assumed that only one spouse has income, to eliminate the effects, when both spouses have income, of Virginia's married-combined filing option in 1998 and the successor spouse tax adjustment.

The last of these assumptions does not represent the situation for the majority of married couples. The married-combined filing class represents 56 percent of all married returns and 26 percent of all returns (see Table 23).

Table 22 compares tax burdens for various family sizes at different AGI levels for taxpayers under 62 years of age. It reveals some strong similarities among the var-

ious options, but also identifies some important differences. Increased tax-free amounts resulting from increased personal exemptions and standard deductions produce lower effective tax rates in most cells for the various options, compared to the current tax, with a few exceptions:

- Applying the current rate structure to the reduced base, not surprisingly, reduces effective tax rates for all twenty-one non-elderly income/family-size combinations shown in Table 22. Based on tax year 1998 data, the Department of Taxation simulation found that applying the current rate structure to the base changes shown in Table 20 would have reduced revenue by 4.1 percent.
- For single taxpayers, effective tax rates rise slightly at \$15,000 of AGI in options 1, 2, 3, 4, and 5 (from 2.87 percent to 3 percent in all but option 1); they also rise slightly for single taxpayers at \$25,000 of AGI in option 1, but only in this single-rate option.
- For families of two or more, all options produce lower tax liabilities at the lowest levels of AGI (except for a family of four at \$15,000 which remains at 0 percent), and most do so through most of the income levels shown. The fall in effective rates generally is quite large at the lowest income levels. For example, the effective rate for a family of two at \$15,000 under the current tax is 1.93 percent. It falls to 1 percent or less in most options. The drop remains significant through \$80,000 of AGI for most options.

Table 23. Distribution of Returns by Filer Class, Tax Year 1999

Filer Class	Number of Returns	All Returns (%)	Married Returns (%)
Single	1,629,454	53.9	---
Married-separate	137,528	4.5	9.9
Married-joint	470,862	15.6	33.7
Married-combined	786,995	26.0	56.4
Total	3,024,839	100.0	100.0

Note: Details may not add to totals due to rounding.

Source: Calculated from *Annual Report Fiscal Year 2001*, table 1.3 [<http://www.tax.state.va.us/pdfs/Publications/AnnualReportFY2001.pdf>].

⁸⁹ *Annual Report Fiscal Year 2001* does not report itemized and standard deduction filers separately, but the state requires that those who itemize on their federal returns also itemize on their state returns. For tax year 1999, over 90 percent of filers with AGI equal to at least \$75,000 itemized, while less than 10 percent with AGI under \$15,000 itemized. Calculated from IRS Publication 1304, table 1.2, revised October 2001 [<http://www.irs.gov/taxstats>].

- At the upper end of the income scale (\$500,000 AGI is the highest in Table 22) five of the seven options produce higher tax liabilities than the current tax; the exceptions are options 1 and 3.
- Options 2 and 4 yield nearly identical effective rates (rates differ only when TI is between \$50,000 and \$65,000), despite the different number of brackets; top and bottom rates are the same in both, and they differ by just one percentage point.
- For all family sizes shown in Table 22, options 6 and 7 provide substantially more progressivity than the current tax or any of the other options. These options reduce effective tax rates even for single taxpayers at \$15,000 of AGI, and they increase effective tax rates for all family sizes in the last three rows (AGI of \$120,000 and higher) in Table 22.

The patterns are logical. Option 1 imposes a single rate of 5.3 percent, which is higher than the current tax's rate until taxable income reaches \$17,000. While the personal exemption is more than tripled in this and the other options, the standard deduction for singles does not rise very much. The net effect is dominance of the higher starting tax rate for single people at the very lowest income levels. For larger families, being able to take more of the increased personal exemptions and also having a larger increase in the standard deduction offsets the influence of the higher initial tax rate, producing net tax reductions. The influence of both tax rates and tax-free amounts is diluted at higher income levels. With regard to the latter, the enhanced tax-free amounts, even the \$17,000 amount for a family of four, become a very small percentage of income when income is \$200,000 or more. And the highest marginal rates in five of the seven options, compared to the current top rate, are either lower (option 1), the same (option 3) or only slightly higher (options 2, 4, and 5).

The different pattern of effective rates for options 6 and 7, and the changes those represent in comparison with the current tax, also is easily understood. For these options, initial rates are lower than in the other options, and apply over a wider range of income than the lowest rates of the current tax; further, the highest rates in these options are well above the current top rate of 5.75 percent.

Removing Tax Preferences

As noted, elderly taxpayers are not represented by the examples for the current tax in Table 22, but those over

65 are shown in Table 6. Ending age preferences would move the elderly to the effective rates shown for the non-elderly in Tables 6 and 22; for those in the 62-64 age range, the change would be less because they enjoy lesser preferences now than those 65 and over. Removing the \$6,000 and \$12,000 deductions and making Social Security taxable to the extent it is taxed by the federal income tax would increase the tax base by about 4 percent overall. This would increase tax liabilities for those with enough taxable-source income to use up the current deduction amounts, although the proposed larger personal exemptions and standard deductions would provide some offset.

Although political resistance to such changes can be expected, changes represented by the proposed alternative tax base definition would make the tax more consistent with the ability-based logic of income taxation, and would improve overall equity – especially horizontal equity. Tax increases resulting from such changes are a measure of the degree of preference now enjoyed. *“In the tax game, . . . [w]hat is a privilege to some group of people is a penalty to everyone else because it forces up tax rates.”*⁹⁰

Another part of the puzzle concerning revenue neutrality, in the face of the Table 22 numbers, is resolved by aggregate data by type of filer provided by the Department of Taxation simulations. These data show that, for tax year 1998, for the current tax and all the options, married-combined returns account for 52 percent to 53 percent of all Virginia individual income tax liability, married-joint returns account for 18 percent to 20 percent, married-separate filings represent another 2 percent to 3 percent, and single taxpayers account for 24 percent to 27 percent.⁹¹

Thus, there are some shifts in tax liability among filer categories that the examples in Table 22 cannot show. For the more steeply graduated options 6 and 7, some of the changes are large; several are above 5 percent, and a few are over 10 percent. For options 1, 2, and 4, with less rate graduation, the shifts are smaller; all are under 5 percent, and the largest is a 3.5 percent in-

⁹⁰ Slemrod and Bakija, *Taxing Ourselves: A Citizen's Guide to the Great Debate Over Tax Reform*. 2000, 77; emphasis added.

⁹¹ Although the Virginia Form 760 provides a space for head of household that is to be marked by those who filed a federal return as head of household, this filing status is not used elsewhere on the form, is not one of the three filing statuses identified in the filing instructions, and is not reported on in the income tax tables in the *Annual Report* series.

crease for single taxpayers. Options 2 and 4 entail the smallest shifts in tax shares among the four groups of filers; single and married-joint filers would see about a 1 percent increase in their tax shares, while married-combined, which accounts for more tax liability than the sum of others, would see a decrease of about 1 percent.

Reconsidering the Standards

The standards considered in the third section may now be reexamined in the context of the policy suggestions. This section provides further consideration of those issues, placing primary emphasis on horizontal and vertical equity.

Horizontal Equity

Equal tax treatment of those in equal circumstances is the test of horizontal equity. Relevant circumstances include factors clearly bearing on ability to pay taxes, especially income and family size.

The Marriage Penalty

Mention of the marriage penalty, sometimes referred to as the “marriage tax,” has been made in consideration of the levels of standard deductions and, thus, tax-free amounts. As noted, Virginia has gone far in preventing tax liabilities of two people from being higher if married than if single, first by allowing married-combined filing and more recently with the spouse tax adjustment for joint filers. Another element of this much-publicized penalty is a standard deduction for a single person that is more than half that for a married couple, and the proposed base changes would rectify that. But this would not eliminate marriage-related concerns with the tax system.

Consider the observation of one tax authority concerning a system such as Virginia’s: “[N]ote that under this system, *a family’s tax liability depends upon who earns what; a family in which total income is divided fairly evenly will owe less than another family with exactly the same total income, but one primary earner.*”⁹²

⁹² Slemrod and Bakija, *Taxing Ourselves: A Citizen’s Guide to the Great Debate Over Tax Reform*. 2000, 83; emphasis added. The authors go on to note: “It also gives rise to incentives to shift income from the higher-earning member to lower-earning members. Couples can manipulate which spouse receives capital income and incurs deductible expenses. This is difficult . . . to monitor.” In Virginia, the new Form 760 does not assign deductions or dependent personal exemptions to the spouses individually, and the “spouse tax adjustment” (line 16 on the 2001 Virginia Resident Form 760) is said to produce the same tax liability under joint filing as filing separately.

Under the current Virginia income tax, a couple with \$25,000 of AGI has an effective tax rate of 2.4 percent if the income is split evenly between the spouses, but one-third more (3.2 percent) if all the income is contributed by one spouse. Similarly, at \$50,000, the effective tax rate is 3.9 percent if income is split evenly between the spouses, compared to 4.5 percent if one spouse accounts for all the income. Such differences diminish at higher income levels, because the lower marginal rates apply to relatively small amounts of income. However, wider brackets, such as those featured in all the multiple-rate options in this study, move the problem up higher into the income range while removing it at the low end. For example, if the first \$50,000 is taxable at 5 percent, then a couple with \$50,000 divided evenly between them will pay the same tax as a couple with \$50,000 total income, all from one spouse. But while the disparity is greatly diminished at \$200,000 under the current tax, it becomes relatively wide at that level of total AGI under some of the options. The difference in marginal tax rates across brackets clearly is a material variable. Option 3, with rates of 5 percent and 5.75 percent, would not present a large disparity.

A single-rate tax, of course, would engender no disparity in effective tax rates based on the division of income between spouses, provided the standard deduction is taken, and that the deduction for a couple is just twice that for an individual. Nor would it present a marriage penalty of the sort discussed earlier. Thus, the single-rate approach is the most neutral with regard to all aspects of marital status: married versus single, one- versus two-income couples. The trade-off for this neutrality and horizontal equity gain, of course, is less progressivity than can be accomplished through multiple-rate tax structures.

How important is the issue of equitable treatment of married couples, independent of their income split between spouses? Married couples account for about 75 percent of all income tax liability. The biggest part of that is from married-combined filers; for this filing status, both spouses have income.⁹³ Joint filers represent about one-fifth of tax liability, part of which is the “penalty” for having only one earner.

Some argue that we need not be concerned with the relatively higher tax burdens on couples with only one spouse contributing income. The argument is that the single-earner couple has to spend less time generating its income than a dual-earner couple, with the result that the single-earner couple has more real income than

⁹³ The latest data available predate implementation of the new Form 760 and the spouse tax adjustment.

a dual-earner couple with the same money income. The alleged higher real income of the single-earner couple is said to result from such home-based services of the “non-working” spouse as meal preparation, house-keeping, and childcare. A variant on this argument is that the single-earner couple has more “leisure” time.⁹⁴

These arguments may or may not be valid. There are numerous cases of one person holding two or more jobs, so one working spouse might work about as many hours as two earners in another family. Similarly, a high-paid consultant may earn more in a few months than another person earns in a year of full-time work. Income tax systems have not been designed to take such differences into account; that is, the amount of income, rather than the hours worked to earn it, is the basis of the tax. However, the arguments in the preceding paragraph seek to justify a horizontal inequity of the current tax system by bringing hours worked, and/or the uses of non-employment hours, into consideration. These are matters that so far have not been considered by the income tax. If they were to have a bearing on tax burdens, this should be accomplished only after thorough, systematic consideration of all relevant concerns.

In short, a very strong case can be made that married couples with the same income and family size are situated equally, or at least very similarly, regardless of the shares of income contributed by each spouse. Horizontal equity requires greater comparability in their tax burdens than is produced in many instances under the current tax. Some of the options presented in this study rank higher from this perspective than others. The essential problem, however, is that we tend to have multiple objectives that cannot be satisfied simultaneously. A single-rate tax is best at furnishing both horizontal equity and neutrality, and it also provides

for vertical equity in the form of progressive effective tax rates, provided there is a significant tax-free amount. If a greater degree of progressivity is desired, though, some of the other objectives must be compromised.

Aged-based Preferences

The age-based preferences granted by Virginia are of three sorts: (1) an additional \$800 personal exemption for persons age 65 and over;⁹⁵ (2) subtraction from federal AGI the Social Security (and similar) benefits brought into the federal tax base, thus fully exempting these benefits at the state level;⁹⁶ and (3) a deduction of \$6,000 for each person age 62-64, and of \$12,000 for each person age 65 and over.⁹⁷

Often, one hears the argument that the elderly are relatively impoverished and, therefore, are a group on which it is appropriate to lavish special tax breaks and benefits. The elderly, as a group, are not especially needy. (see **Table 24**). Regardless of relative poverty rates, however, it is neither necessary nor appropriate to use age, or any other characteristic, as a proxy for ability to pay income taxes. The tax base is income, and those with little or no income will have little or no tax burden. The special tax breaks for the elderly benefit only those with taxable-source income to be offset by them, and both the added personal exemption and the \$6,000 or \$12,000 additional deduction are of greatest benefit to those with the most income. Moreover, the non-elderly account for over 89 percent of those in poverty, and it is the non-elderly for whom much of poverty income is left in the Virginia income tax base.

Special income tax breaks for everyone in a certain group defined by some characteristic such as age are a poor way to deal with those in the group who are in need. Such tax breaks provide benefits for all within

Table 24. Poverty Status of Virginia Population, Selected Age Groups, 1999

Age Group	Population ^a	Poverty	Poverty Rate	
			Virginia (%)	United States (%)
Total	6,847,117	656,461	9.6	12.4
Under 18 ^b	1,707,933	209,352	12.3	16.7
18-64 ^b	4,386,079	375,564	8.6	11.1
65 and over	753,105	71,545	9.5	9.9

Source: Bureau of the Census, Census of Population, 2000: <http://censtats.census.gov/pub/Profiles.shtml>

Note: The 2000 census was based on income in 1999 and population in 2000.

^a Excludes population in group quarters.

^b Data derived from Census totals.

⁹⁴ For consideration of such arguments, see Munnell, “The Couple versus the Individual under the Federal Personal Income Tax.” 1980, 259-67.

⁹⁵ *Code of Virginia*, §58.1-322 C.

⁹⁶ *Code of Virginia*, §58.1-322 C. 4.

⁹⁷ *Code of Virginia*, §58.1-322 D. 5.

the group, regardless of their need. As an example, 18 percent of the additional personal exemptions granted the elderly in tax year 1999 were claimed on tax returns with at least \$50,000 of AGI; by comparison, the median AGI class for all returns was \$25,000-\$29,999.⁹⁸ Because AGI excludes Social Security, the percentage of such exemptions claimed by those at relatively high income levels would be even higher if a broader, more appropriate measure of income were used. Basing the tax on income enables differences in relative taxpaying abilities to be addressed directly. Relying on proxies, whether age, blindness, military status, or something else, is not necessary. For Virginia, the list is quite long. The instructions for the 2001 individual income tax returns list 26 different “other” subtractions from federal AGI, in addition to three specific categories of subtractions (see Appendix B).⁹⁹ Far from improving equity, granting special concessions based on such characteristics reduces it. Even when the adjustments inarguably are for what is generally considered to be a good cause, there usually will be other equally good causes that are not singled out for special treatment. The basic point is that proxies for need, or for effects on taxpaying ability, are not appropriate in an income tax that measures ability by income as modified by general standard deductions or carefully framed categories of itemized deductions. Additional, specific concessions cause very unequal tax burdens to be imposed on people with equal ability to pay, in violation of the criterion of horizontal equity. Moreover, by narrowing the base of the tax, such concessions impose a cost on others in the form of higher tax rates or a lower level of services due to reduced revenue.

The age-based preferences also will become increasingly costly as the population ages. The number over age 65 has been growing more rapidly than the population under 65, and the difference is projected to accelerate between 2015 and 2025, when many baby boomers retire (**Figure 4**).

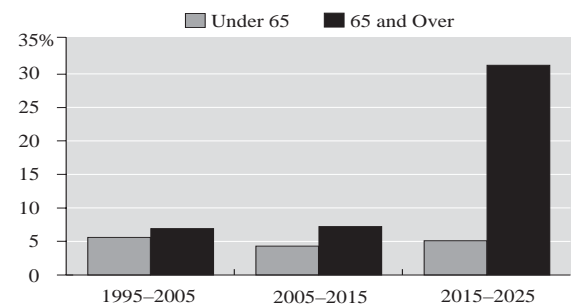
Vertical Equity

The effective tax rates in Table 22 show that several of the alternative tax structures considered in this study would increase the effective tax rates on single filers at the lowest income level. Because income levels for singles are generally lower than those for married couples this translates into an increase in the share of taxes borne by single filers. This is the case for options 1-5,

⁹⁸ *Annual Report Fiscal Year 2001*, table 1.4.

⁹⁹ *2001 Virginia Resident Individual Income Tax Booklet*, 2001, 15-17.

Figure 4: Projected Percentage Change in Virginia Population by Age Group, 1995-2025



Source: U.S. Census Bureau

<http://www.census.gov/population/projections/state/stpjtage.txt>

but not for the rather steeply graduated options 6 and 7. The greatest increase, about 3.5 percent, occurs with the single-rate alternative, option 1; for the other three options that increase singles' tax share, the increases are about 1 percent.

This result is in spite of the state's credit for low-income individuals if total family AGI is at or below the poverty threshold. This credit was designed to eliminate any tax liability below the poverty threshold. The higher tax-free amounts suggested in this study remove at least poverty level income from the tax base, except for a single person with no dependents. For all other taxpayers, adopting the higher standard deduction and personal exemption amounts would make the CLI irrelevant, but only if those amounts are regularly increased in line with increases in the cost of living. For a single individual, the poverty line in 1998 was \$8,316, and the tax-free amount for 1998 for all options considered in this study is \$6,000. This would have left \$2,316 taxable for an individual at the poverty line.¹⁰⁰ The CLI effectively removes this from taxation, but the tax relief does not extend beyond the poverty level.¹⁰¹ It is the abrupt termination of the CLI at the poverty line that makes it a poor substitute for increasing personal exemptions and standard deductions to take poverty income out of the tax base, as already discussed. All the examples in Table 22 are for incomes above the

¹⁰⁰ The change in poverty thresholds between 1998 and 2001 shown in Table 15 underscores the importance of indexing, but note the non-comparability of the two years' numbers for single individuals in the discussion of that table.

¹⁰¹ The Virginia credit provides for keeping up with inflation, in that the code section creating it adopts the annual changes to the poverty levels determined by the U.S. Government.

poverty level, except for families of four at \$15,000 of AGI, and all the options result in zero tax liability for these, because of the tax-free amount. The existence of the CLI therefore does not alter the effective rates shown in Table 22. Nor does it alter the information on tax shares by type of filer, because the credit is programmed into the Department of Taxation's simulations, from which the tax shares were derived. The conclusions stated earlier stand.

Using both standard deductions and personal exemptions to determine tax-free levels of income permits these to be matched more closely to the poverty thresholds than use of only personal exemptions, but the fit still is not perfect. Moreover, marriage-penalty considerations work to leave more poverty income in the tax base for individual taxpayers than for families of two or more. The Virginia CLI can remove poverty level income from taxation, even for single taxpayers. However, because it goes to zero when income rises above poverty, it leaves taxable a substantial portion of poverty level income for those above poverty, creating large notch effects.

The credit as structured would be less important to those with incomes below the poverty line if the tax-free amounts in the income tax code were increased to more appropriate levels and then indexed. This would be true, particularly if any eventual change in the state's income tax structure is along the lines of options 1-5 rather than options 6 and 7. Therefore revision of the CLI is appropriate. One option clearly is to adopt a refundable earned-income tax credit, set at some percentage of the federal EITC. Compared to the current Virginia CLI, it has two principal advantages. First, it is phased out as income rises, rather than terminating abruptly at the poverty line. The "notch problem" of the current Virginia credit is illustrated by last column of **Table 25**, which shows the effects of the credit on tax liability at and below the poverty line and at one dollar above the poverty line. Second, the EITC is refundable,¹⁰² which would provide significant relief at the low end of the income spectrum to keep effective tax rates there from rising as part of the overall reform package. The cost of such a credit for Virginia, including the refundable feature, has been estimated to be about \$60 million for each 10 percent of the federal credit.¹⁰³ Because the current CLI costs about \$20 mil-

Table 25. Effect of Virginia's Credit for Low-income Individuals on State Personal Income Tax Liability at the Poverty Line, for Families with One or Two Adults (Parents) and Zero to Four Children

Number of Adults	Number of Persons in Family ^a	1998 Poverty Level ^b (\$)	Tax-Free Total Amount ^c (\$)	Taxable Poverty Income (\$)	Gross Tax (\$)	Maximum Credit (\$)	Net Tax After Credit (\$)	Tax on \$1 Above Poverty (\$)
One	One	8,316	3,800	4,516	105.48	300	0	105.51
One	Two	10,634	4,600	6,034	171.70	600	0	171.75
One	Three	13,120	5,400	7,720	256.00	900	0	256.05
One	Four	16,530	6,200	10,330	386.50	1,200	0	386.55
One	Five	19,453	7,000	12,453	492.65	1,500	0	492.70
Two	Two	10,634	6,600	4,034	91.02	600	0	91.05
Two	Three	13,120	7,400	5,720	156.00	900	0	156.05
Two	Four	16,530	8,200	8,330	286.50	1,200	0	286.55
Two	Five	19,453	9,000	10,453	392.65	1,500	0	392.70
Two	Six	21,780	9,800	11,980	469.00	1,800	0	469.05

Source: Author's calculations.

Note: This table uses a \$300 per person, nonrefundable credit, applicable only up to the poverty level, pursuant to the current statute (*Code of Virginia*, §58.1-339.8).

^a Number of parents plus number of children.

^b Poverty thresholds for 1998 (see Table 3, panel 1) are used because simulations reported elsewhere in this study are based on 1998. These examples ignore the problems with poverty definitions that reportedly can cause some at the poverty line to have tax liability. See Zahradnik, "Virginia Has Improved the Tax Treatment of Low-Income Families." 2001.

^c Sum of standard deductions (\$3,000 for single taxpayer, \$5,000 for a married couple) plus standard deductions (\$800 per person).

¹⁰² As explained in the section on the earned-income tax credit, it might be more appropriate to refer to this as a grant, or transfer, in that the recipient may never have paid the tax that is being "refunded." When the credit exceeds tax liability, the excess is paid to the filer; because the income tax is the vehicle used for this transfer, it has been called a refund.

¹⁰³ Johnson, "State Earned Income Tax Credit." 2000, 1241.

lion, the increased cost of replacing it with an EITC equal to 20 percent of the federal credit would be about \$100 million. All of the tax-structure options presented in this study are estimated to produce essentially the same revenue as the current tax, based on 1998 collections. Because the exact amounts often are as much as \$100 million above the 1998 aggregate liability for the current tax, such a credit would be within the goal of essential revenue neutrality. The federal EITC, however, provides only scant relief to individuals without children, so even this change would leave a relatively high tax burden on single individuals with no dependents whose incomes are near the poverty level. It would seem preferable for the state to opt for a lower percentage of the federal EITC for those with children to make possible more generous credits for individuals and couples with no eligible children.

Other Standards

In addition to horizontal and vertical equity, standards for a good tax include simplicity and avoidance of adverse incentives. The desirability of keeping the tax structure in tune with changing circumstances is not listed as a separate criterion. The major recommendation to flow from that consideration is indexing, and that has been discussed in connection with equity concerns. At times, the various standards can be satisfied simultaneously, but often there are trade-offs, which make it necessary to weigh the competing objectives of tax policy.

Simplicity

The objective of tax simplicity is to make tax administration and tax compliance as simple as possible, consistent with other objectives. If this is accomplished, resources and taxpayers' time will not be wasted trying to understand needless complexity. Greater conformity of state income tax provisions to federal tax provisions is a source of increased simplicity and, as discussed earlier, greater conformity would be appropriate in some instances. In others, though, there is a conflict with other objectives. For example, in comparison to the standard deduction amounts suggested in this study, adopting federal standard deduction amounts would remove more poverty income from the base for single taxpayers. A case can be made for that, but the same measure also would add an element of marriage penalty that the state might wish to avoid.

Avoidance of Adverse Incentives

Tax-induced behavior changes generally should be avoided. When an action that would not be taken, absent tax considerations, becomes the preferred action because of tax provisions, misallocation of resources results. This means society is able to gain less satisfaction.¹⁰⁴ Examples include exclusion from the tax base of income from certain sources. For example, Virginia's exclusion of a portion of military pay tends to make service in the military relatively more attractive than, say, service in the local police force, because the tax preference increases disposable income for those with military pay. Many provisions that provide preferential tax treatment in specific cases create incentives that may not be desirable, as well as adding complexity, providing instances in which the standards for a good tax are not in conflict. Another source of adverse incentives is large differences in marginal tax rates. It is not possible to make a tax completely neutral by making avoidance completely impossible; for example, leisure time is not subject to income taxation, but work time is. Therefore, it is important that the marginal rates be kept relatively low, so that the tax difference between taxable and nontaxable activities is kept as small as possible. The literature on the tax effects on economic activity suggests that taxes often are important. Such considerations favor a single tax rate or a rate structure with a narrow range of marginal tax rates. Finally, the Virginia CLI needs to be modified, not only for equity, but also to remove the large tax jump when income rises above poverty. This tax "notch" can amount to several hundred dollars (see Table 25), which may be an important disincentive in seeking to rise above poverty.

INCREASING THE YIELD OF THE TAX

Thus far this study has investigated revenue-neutral options for altering tax policy. However, it is possible that Virginia might want to increase revenue yield, either coincident with tax reform or at a later date.

Some approaches to raising additional funds from the income tax are better than others. In general, the best way to increase revenue yield is through rate increas-

¹⁰⁴ An exception is a non-neutral tax designed to offset another non-neutrality, such as a tax on pollution designed to take away the advantages of polluting that tend to result from the common-property (as opposed to private property) nature of such resources as water and air. One must be careful, however, not to extend this corrective logic to cases where it is not appropriate.

es, rather than reductions in tax-free amounts. For short-term increases, tax surcharges could be used. An example is provided by the 1968-1970 federal income tax surcharge.¹⁰⁵ Moreover, in times of abundant state revenues, a uniform percentage decrease in calculated tax liability (a sort of negative tax surcharge) could be used as a means of distributing the surplus. More permanent rate changes should be designed with the logic of the overall structure in mind.

If the state chooses a single rate or another compressed-rate structure for horizontal equity and tax neutrality advantages, grafting on a new, higher rate bracket would be inappropriate. That approach may be popular politically, and it is the one the state took in adding the fourth bracket in 1972. Addressing a problem of revenue adequacy via such a change, however, would alter

the tax structure in ways that diminish horizontal equity and tax neutrality. Moreover, it is less appropriate if indexing of the tax structure is adopted. Alternatively, the state might choose more steeply graduated rates, to achieve a given degree of progressivity. Such a structure would make indexing even more important to keep the tax structure from becoming as outdated as the current one. If indexing is not adopted, periodic discretionary adjustments must be given high priority. Particularly for short-term revenue enhancement, the best approach might be a tax surcharge. If the tax base were changed, increases that rely on reducing personal exemptions and/or standard deductions should be avoided. Any preferences at odds with the ability-based logic of the tax that had not been ended earlier might well be ended in such circumstances.

¹⁰⁵ Pechman, *Federal Tax Policy*. 1987, 75.

CONCLUDING COMMENTS

The Virginia individual income tax is the workhorse of the state-local tax system now, and it is likely to become even more dominant in the coming years. It is important, therefore, that the burdens imposed by the tax be as fair as possible, and that the tax be as neutral as possible with respect to taxpayers' decisions and actions.

The current tax structure is outdated and flawed. The basic rate structure has been unchanged for nearly seventy-five years. Personal exemptions and standard deductions are too low. The personal exemption was unrealistic even after the latest increase in 1987, and the standard deductions have fallen below reasonable levels because they have not been changed in over a decade. Together, these features determine the tax-free amount, and for all household or family sizes, this amount falls far short of the poverty threshold. As a result, most Virginians pay income tax on income within the poverty level. This is a serious flaw in a tax ostensibly based on ability to pay. Income below the poverty level does not constitute taxpaying ability. While the credit for low-income individuals (CLI) implemented in 2000 helps many below the poverty line, it does not help everyone. Moreover, it does nothing for those with income above poverty, however slightly above, and this abrupt cessation of the CLI creates large "notch" effects that impose very high effective tax rates, at the margin, for the first dollars above poverty.

Another weakness, given the ability-based logic of the tax, is that some taxpayers are provided vastly larger tax-free amounts than others, solely because of income source or attributes such as age. To some degree, these features offset the inadequacy of the tax-free amounts, but they do so quite haphazardly; too often, the problems are additive, rather than offsetting. Preferences bestowed on such basis violate horizontal equity. As shown in this study, effective tax rates vary widely among taxpayers at the same AGI level. Those numbers, although illuminating, understate the degree of inequity to the extent that AGI fails to include some sources of income. The income tax logically is based

on income, taken as a measure of taxpaying ability. Disregarding large chunks of income on the basis of income source, age of recipient, or any other proxy for need, ability, or some other reason, is inappropriate and inequitable. What is intended as a tax break for one group necessarily is a tax penalty for others; to raise a given amount of revenue from the diminished base requires higher rates. Alternatively, a higher level of public services can be funded if these breaks are removed.

To address these problems, revision of the tax base is proposed. The revisions would end preferences of the sort just noted, and would increase tax-free amounts to have them better correspond to poverty levels. The personal exemptions and standard deductions comprising the tax-free amounts should be indexed to increase with inflation; failing that, their levels should be reviewed and adjusted biennially. Because the levels used in this study relate to 1998, the baseline for revenue neutrality, they already are too low. Failure to adjust personal exemptions and standard deductions in the past has created the inadequacies addressed here. Some of the base changes might be phased in over time, perhaps three to five years, to reduce the shock to those losing preferences. Grandfathering the preferential treatment for those already receiving the benefits might be considered, but this would create added complexity and perpetuate horizontal inequities for many years.

If reforms of the type recommended in this study are adopted, low-income taxpayers generally will pay lower taxes and high-income taxpayers will pay higher taxes. It is important to note that the elimination of tax preferences will not necessarily increase the tax bills of those with very low incomes because of the offsetting effects of broader brackets, higher exemptions or credits, and a higher standard deduction. In addition, the many high-income taxpayers who itemize deductions will obtain significant tax relief by claiming their higher state income taxes as expenses on their federal returns. Furthermore, taxpayers who itemize deductions will lower the effective rates exhibited in this monograph.

In addition to base changes, changes in the rate structure also are called for. The current structure starts with brackets that are very narrow in relation to today's incomes and living costs. The first bracket has been \$3,000 for over eighty years, while the fourth and highest bracket starts at only \$17,000. If Virginia desires the greater progressivity obtainable from graduated rates, this structure no longer serves that objective.¹⁰⁶ The combination of rate graduation and small tax-free amounts gives an income tax whose pattern of effective tax rates is no more progressive than a single-rate tax with realistic tax-free amounts.

Several options for new rate structures are presented in this study. Some provide more rate graduation than others. A single-rate tax offers several advantages compared to graduated structures, including improved neutrality and horizontal equity among all types of fil-

ers at a given income level, and among married couples who differ only in the division of income between spouses. There is a trade-off between such gains and the degree of progressivity. In general, however, states should not seek a high degree of progressivity because of the incentive effects created. The open borders of states make any significant redistribution inappropriate at this level of government.

Vertical equity can be improved at the same time that marginal tax rates are compressed, even to the point of uniformity. An earned-income tax credit set at a percentage of the federal credit, and made refundable like the federal credit, has some advantages for this purpose. However, careful consideration should be given to the possibility of providing for a higher percentage of the federal EITC for taxpayers without qualifying children, for whom the federal credit is much lower.

¹⁰⁶ Effective tax rates across income levels under the graduated-rate Virginia income tax have been shown to be essentially the same as some flat-rate alternatives. See Bowman and Mikesell, "Flat and Graduated Rate Personal Income Taxes." Undated.

APPENDIX A

Department of Taxation Information on the Credit for Low-income Individuals

You may qualify to claim the Credit for Low Income Individuals (CLI) if your total family adjusted gross income from all members of the household is below federal poverty guidelines. Family income includes income earned by you, your spouse and all dependents claimed on your return. If you are married filing separately (filing status 3), the family income includes income from your return, your spouse's return and any income for any dependents claimed on either return. If you are filing married filing separate, only one spouse may claim the CLI.

The maximum credit you may claim is equal to \$300 for each personal and dependent exemption claimed on your Virginia return. Unlike the Federal Earned Income Credit, this credit is not refundable. The amount of CLI claimed may not exceed your tax liability. Excess credit amounts may not be carried over to future years.

You may not claim this credit if you, your spouse or any dependent listed on your return claimed one or more of the following deductions or subtractions:

- 1) subtraction for wages or salaries received by members of the Virginia National Guard
- 2) subtraction of \$15,000 of military basic pay for military service personnel on extended active duty
- 3) subtraction for the first \$15,000 of salary for each federal and state employee whose annual salary is \$15,000 or less
- 4) additional personal exemption for blind or aged taxpayers (it may be to your advantage to use the Low Income Credit instead of taking the exemption for being blind)
- 5) deduction for taxpayers 62 or older

You also cannot claim this credit if you were claimed as a dependent on another taxpayer's return. Claiming the credit is a two-step process. First, you must determine if you qualify for the credit. If so, then you must calculate the amount of the credit.

Use the following table to see if you qualify for this credit.

<u>If your exemptions equal:</u>	<u>Your family income must be less than:</u>
1	\$8,590
2	\$11,610
3	\$14,630
4	\$17,650
5	\$20,670
6	\$23,690
7	\$26,710
8	\$29,730

For each additional exemption over 8, add \$3,020 to the guidelines. The exemptions are for personal exemptions only. Do not include exemptions claimed for blindness or age.

If you qualify to take the credit, your credit is the total exemptions claimed on your return (you, your spouse and dependents) multiplied by \$300. The credit cannot be more than your total tax as shown on line 17 of your Form 760.

EXAMPLE:

A taxpayer files a return using Married Filing Joint (status 2) and claims two dependents. Both spouses have income. One dependent is a teenager with a part time job. The other dependent has no income. Their tax is \$235. Eligibility for the CLI and the amount of credit is determined as follows:

Taxpayer's VAGI	\$13,500
Spouse's VAGI	\$ 2,000
Dependent 1 VAGI	\$ 1,500
Dependent 2 VAGI	\$ 0
Total Family VAGI	\$17,000

Looking at the above chart, the guideline for a family of 4 is \$17,650. Therefore, this taxpayer qualifies for the CLI. The credit is the lessor of the total credit or the total tax. Their total credit is \$1,200 (\$300 x 4 dependents). However, their total tax is only \$235.

Therefore, this taxpayer would receive a credit of \$235.

To claim this credit, complete Schedule ADJ and attach it to your Form 760.

NOTE: If you file your return using the iFile on-line filing application located at this website, the CLI will be automatically calculated for you.

Reference: *Code of Virginia*, §58.1-339.8.

Source: Virginia Department of Taxation website: http://www.tax.state.va.us/it_credit_pg2.htm#individ

APPENDIX B

Department of Taxation List of Income Adjustments

The starting point for computing Virginia taxable income is federal adjusted gross income. Virginia law specifically exempts from income tax certain types of income that may have been reported in federal adjusted gross income. Those items should be subtracted in computing Virginia taxable income. The allowable subtractions are listed below.

Age Deduction for Taxpayers Age 62 and Over

Individuals who are age 62 to 64 by midnight, January 1, of the year in which a return is due may claim a subtraction of \$6,000 on their income tax returns. Individuals who are age 65 or over by midnight, January 1, may claim a subtraction of \$12,000. You may not claim the age deduction if you claim the Disability Income subtraction. Report on Form 760, line 4. *Code of Virginia* §58.1-322[D][5]

Social Security Act and Equivalent Tier 1 Railroad Retirement Act Benefits

Virginia law exempts Social Security and Tier 1 Railroad Retirement benefits from taxation. If you were required to include any of your benefits in federal adjusted gross income, subtract that amount on your Virginia return. For subtracting other benefits, see Tier 2 and other Railroad Retirement and Railroad Unemployment Benefits. Report on Form 70, line 5. *Code of Virginia*, §58.1-332[C][4]

State Income Tax Refund or Overpayment Credit

Virginia law allows a subtraction for the amount of any state refund or overpayment credit included in federal adjusted gross income. The subtraction is the amount of refund or credit you reported on your federal return. Report on Form 760, line 6. *Code of Virginia*, §58.1-322[C][5].

Obligations of the U.S.

Virginia law allows a subtraction for income (interest) derived from obligations or income (dividends and gains) derived from the sale or exchange of obligations of the United States, and on obligations or securities of any authority, commission or instrumentality of the United States to the extent the income is included in federal adjusted gross income. The amount to be subtracted is the income less any related expenses already deducted on the federal return. The subtraction applies only to income from direct obligations. For information on obligations that qualify for the subtraction, see PD 94-281. Report on Schedule ADJ, Line 4. *Code of Virginia*, §58.1-322[C][1].

Disability Income

Up to \$20,000 of disability income as defined by the Internal Revenue Code Section 22 (C) (2) (B) (iii) can be subtracted when calculating Virginia taxable income. As defined under federal law, the subtraction applies to income received for permanent and total disability. The subtraction is equal to the amount of income received for total or permanent disability, not to exceed \$20,000. You may not claim this subtraction if you claim the Age Deduction for Taxpayers Age 62 and Over. Report on Schedule ADJ, Line 5. *Code of Virginia*, §58.1-322[C][4b].

Income from Virginia Obligations

If interest on a Virginia state or municipal obligation or gains from sales of those obligations must be included in federal adjusted gross income, the income may be subtracted in computing Virginia taxable income. The amount to be subtracted is the amount of income included in federal adjusted gross income, less related expenses deducted on the federal return. For information on obligations that qualify for the subtraction, see PD 94-28. Report on Schedule ADJ, Line 6, Code 20. *Code of Virginia*, §58.1-322[C][2].

Federal Work Opportunity Tax Credit Wages

Federal law allows a credit for wages paid to certain employees. If the credit is claimed, those wages cannot be deducted as an expense on the federal income tax return. Virginia law does not provide a corresponding credit, but allows a subtraction for the wages that were not deductible on the federal return. The amount to be subtracted is the amount of wages or salaries eligible for the federal work opportunity tax credit that were not deducted for federal income tax purposes. Report on Schedule ADJ, Line 6, Code 21. *Code of Virginia*, §58.1-322[C][6].

Tier 2 and other Railroad Retirement and Railroad Unemployment Benefits

Virginia law exempts Social Security Tier 2 vested dual benefits, other Railroad Retirement Act benefits, and Railroad Unemployment Insurance benefits from income tax. The amount to be subtracted is the benefit amount that was included in federal adjusted gross income as a taxable pension or annuity, and that was not already deducted on your federal return. Report on Schedule ADJ, Line 6, Code 22. *Code of Virginia*, §58.1-322[C][4].

Charitable Mileage

Federal law allows a deduction for mileage driven to and from volunteer work, Virginia law allows a deduction of 18 cents per mile. An additional subtraction may be claimed on the Virginia return. Subtract the difference between the federal per-mile rate and the Virginia per mile rate. Report on Schedule ADJ, Line 6, Code 23. *Code of Virginia*, §58.1-322[D][1a].

Virginia Lottery Prizes

Any Virginia Lottery prize of less than \$600 that has been included in federal adjusted gross income may be subtracted on the Virginia return. If more than one prize has been received, each prize of less than \$600 may be subtracted. Report on Schedule ADJ, Line 6, Code 24. *Code of Virginia*, §58.1-322[C][10].

Foster Care Subtraction

Virginia law allows a subtraction of \$1,000 per child for qualifying foster parents, providing they claim the foster child as a dependent on their federal and Virginia income tax returns. A statement certifying that the parents are eligible for the subtraction must be attached to the return. The amount to be subtracted is \$1,000 for each child residing in your home under permanent foster care as defined in Title 63.1 of the Code of Virginia, provided you claim the child as a dependent on your federal return. Report on Schedule ADJ, Line 6, Code 25. *Code of Virginia*, §58.1-322[D][4].

Foreign Source Income

Income included in federal adjusted gross income that meets the Internal Revenue Code definition of foreign source income may be subtracted in computing Virginia taxable income. Foreign source income includes:

- Interest derived from sources outside the United States;
- Dividends derived from sources outside the United States;
- Rents, royalties, license and technical fees from property located or services performed outside the United States, or from interest in any such property. This includes rents, royalties or fees for the use or privilege of using patents, copyrights, secret processes and formulas, goodwill, trademarks, trade brands, franchises and similar properties outside the United States.
- Gains, profits, or other income from the sale of intangible or real property located outside the United States. Report on Schedule ADJ, Line 6, Code 26. *Code of Virginia*, §58.1-322[C][7].

Agricultural Product Donations

Individuals who contribute agricultural products to nonprofit or charitable organizations through gleaning programs may subtract the wholesale market price of the products in computing Virginia taxable income. The amount to be subtracted is the wholesale market price, not deducted from federal adjusted gross income, of edible agricultural products donated to a nonprofit or charitable organization exempted from taxation by Section 501 (C) (3) of the internal Revenue Code. Report on Schedule ADJ, Line 6, Code 27. *Code of Virginia*, §58.1-322[C][4].

Virginia National Guard Income

Wages or salaries received by persons whose military rank is O3 (captain) or below for active or inactive service in the Virginia National Guard are eligible for subtraction on the Virginia return. The subtraction is restricted to the amount of

income received for up to 39 days of service or \$3,000, whichever is less. The subtraction is not allowed for wages or salaries paid by the National Guard of any other state. The subtraction is the amount of wages or salaries for active and inactive service in the National Guard of the Commonwealth of Virginia included in federal adjusted gross income. Report on Schedule ADJ, Line 6, Code 28. *Code of Virginia*, §58.1-322[C][11].

Operation Joint Endeavor Combat Pay

Combat pay for service in support of Operation Joint Endeavor can be subtracted if included in federal adjusted gross income. Virginia law grants a total Virginia income tax exclusion of combat pay received for service in support of Operation Joint Endeavor. Under federal law, enlisted personnel receive a total federal exclusion, but officers may be subject to a limited federal exclusion. Since the Virginia income tax computation is based on federal adjusted gross income, any amount of combat pay excluded on the federal return carries through as an exclusion on the Virginia return. For this reason, only officers who have a limited federal exclusion are eligible for this Virginia subtraction. The subtraction is equal to the portion of combat pay subject to federal taxation. Report on Schedule ADJ, line 6, Code 29. *Code of Virginia*, §58.1-322[C][18].

Military Pay and Allowances to Active Duty Service in a Combat Zone or a Qualified Hazardous Duty Area

A subtraction can be claimed for all military pay and allowances attributable to service in a combat zone or qualified hazardous duty area designated by order of the President of the United States with the consent of Congress. Virginia's conformity with federal law allows the exclusion of certain military pay associated with duty in combat zones and hazardous duty areas as provided under the Internal Revenue Code. The amount of the Virginia subtraction is the portion of an officer's pay that is not currently excluded from federal adjusted gross income under the Internal Revenue Code provisions. Report on Schedule ADJ, line 6, Code 30. *Code of Virginia*, §58.1-322[C][21].

Retirement Plan Income Previously Taxed by Another State

A Virginia subtraction is allowed for individuals who receive distributions from retirement plans. The subtraction can be taken only if the individual was taxed on contributions originally made to the retirement plan in another state that were deductible from federal adjusted gross income during the same period. The subtraction applies to qualifying distributions from a qualified pension, stock bonus or profit-sharing plan as described by IRC Section 401, an individual retirement account or annuity established under IRC Section 408, a deferred compensation plan as defined by IRC Section 457, or a federal government retirement program. Conditions for Qualification:

Contributions must have been made to an IRS Qualified Plan;

The contributions must have been deductible for federal income tax purposes; and

The contributions must have been subject to income tax in another state.

Report on Schedule ADJ, Line 6, Code 31. *Code of Virginia*, §58.1-322[C][19].

Bone Marrow Screening Fee

Bone marrow donors may subtract the amount of the screening fee required to become a donor. The subtraction is allowed only if the individual was not reimbursed for the fee and did not claim a deduction for the fee on the federal income tax return. Therefore, the amount to be subtracted is the amount of the fee for which you have not been reimbursed, and that you have not claimed as a deduction on your federal return. Report on Schedule ADJ, Line 6, Code 32. *Code of Virginia*, §58.1-322[D][6].

Virginia College Savings Plan Prepaid Tuition Contract Payments and Savings Account Contributions

Contributions made during the taxable year for a savings trust account with the Virginia Higher Education Tuition Trust Fund may be entered as a subtraction on the Virginia return. The maximum subtraction per contract or savings trust account in any taxable year is \$2,000. Any unused balance may be carried forward until the purchase price is fully deducted. A purchaser of a prepaid tuition contract who is age 70 or over is not subject to the \$2,000 limitation in any taxable year, and may claim a subtraction for the full amount paid for the contract, less any amounts previously deducted. Do not include any amount that was deducted on your federal income tax return for such payments or contributions. If a distribution or refund is received in the future for a reason other than to pay qualified higher education expenses, or the beneficiary's death, disability, or receipt of a scholarship, any deduction taken for the contract purchase or contribution is subject to recapture. Report on Schedule ADJ, Line 6, Code 33. *Code of Virginia*, §58.1-322[D][7].

Virginia College Savings Plan Income Distribution or Refund

Income that is included in federal adjusted gross income that is attributable to a distribution of benefits or a refund from the Virginia Higher Education Tuition Trust Fund may be entered as a Virginia subtraction. The subtraction for any income attributable to a refund is limited to the amount of income attributable to a refund in the event of a beneficiary's death, disability, or receipt of scholarship. Report on Schedule ADJ, Line 6, Code 34. *Code of Virginia*, §58.1-322[C][20].

Continuing Teacher Education

An individual employed as a licensed primary or secondary school teacher may enter a subtraction on the Virginia income tax return for an amount equal to twenty percent of the tuition costs incurred to attend continuing teacher education courses that are required as a condition of employment. The subtraction is available only if the individual was not reimbursed for these tuition costs and the individual has not claimed a deduction for these tuition costs on the federal income tax return. The amount of the subtraction is 20 percent of the tuition costs for which you have not been reimbursed or that you have not claimed as a deduction on your federal return. Report on Schedule ADJ, Line 6, Code 35. *Code of Virginia*, §58.1-322[D][9].

Long Term Health Care Premiums

Individuals may deduct long-term health care insurance premiums, provided the premiums have not been deducted for federal income tax purposes. The premiums must be paid specifically for a long-term health care policy. The amount to be subtracted is the cost of long-term health care insurance premiums that has not been deducted on your federal return. Report on Schedule ADJ, Line 6, Code 36. *Code of Virginia*, §58.1-322[D][10].

Unemployment Compensation Benefits

Unemployment benefits received during the taxable year and included in federal adjusted gross income may be subtracted on the Virginia return. The amount of the subtraction is the amount of unemployment benefits that were included on your federal return. Report on Schedule ADJ, Line 6, Code 37. *Code of Virginia*, §58.1-322[C][25].

First \$15,000 of Basic Military Pay

Up to \$15,000 of military basic pay received during the taxable year may be exempted from Virginia income tax. The subtraction is reduced when military pay exceeds \$15,000 and is fully phased out when pay reaches \$30,000 (i.e., for every dollar that military basic pay exceeds \$15,000, the subtraction is reduced by one dollar). Military personnel must serve on active duty for 90 days or more, and can be stationed inside or outside of Virginia. Report on Schedule ADJ, Line 6, Code 38. *Code of Virginia*, §58.1-322[C][23].

Federal and State Employees

Federal and state employees whose total salary from a federal or state government job is \$15,000 or less may exempt up to \$15,000 of that salary from Virginia income tax. Virginia employees working in universities, colleges and community colleges who are eligible for the subtraction include, but are not limited to: Virginia employees of state-supported institutions of higher education in the Commonwealth, and employees of publicly supported comprehensive community colleges. Federal employees who are not eligible for the subtraction include but are not limited to the following: Members of the active or reserve components of Army, Navy, Air Force, or Marines, National Guard of Virginia, any other state, or District of Columbia. Additionally, local government employees and United States Postal Service employees are not eligible for the subtraction. If you held more than one state or federal job, W-2's for all of those jobs must be considered to determine whether you qualify for the subtraction. If the total salaries reported exceed \$15,000, you may not claim the subtraction. Report on Schedule ADJ, Line 6, Code 39. *Code of Virginia*, §58.1-322[C][24].

Income Received by Holocaust Victims

Individuals may claim a subtraction for income resulting from the return or replacement of assets stolen during the Holocaust and throughout the time period leading up to, during, and directly after World War II, if that income was included in federal adjusted gross income. The subtraction is the amount of income from the return or replacement of assets that has not been deducted or excluded from income on your federal return. Report on Schedule ADJ, Line 6, Code 40. *Code of Virginia*, §58.1-322[C][28].

Payments Made Under the Tobacco Settlement

Individuals and corporations may subtract income received as the result of payments from the Tobacco Master Settlement Agreement, the National Tobacco Grower Settlement Trust, or the Tobacco Loss Assistance Program. Report on Schedule ADJ, Line 6, Code 41. *Code of Virginia*, §58.1-322[C][27].

Gain on the Sale of Land for Open Space Use

Individuals and corporations may subtract the gain on the sale of land to an organization that dedicates the land for open-space use. The amount of the subtraction is the gain included in federal adjusted gross income, not the gross sale amount. Report on Schedule ADJ, Line 6, Code 42. *Code of Virginia*, §58.1-322[C][22].

Virginia Public School Construction Grants Program and Fund

Individuals may deduct the amount of contributions made to the Virginia Public School Construction Grants Program and Fund, to the extent the contributions were not deducted for federal purposes. The amount of the subtraction is the amount of the contribution less any amount deducted on your federal return. Report on Schedule ADJ, Line 6, Code 43. *Code of Virginia*, §58.1-322[D][8].

Congressional Medal of Honor Recipients

Military retirement income received by individuals awarded the Congressional Medal of Honor can be subtracted from federal gross income. The amount of the subtraction is the amount of military retirement benefits reported in federal adjusted gross income. The subtraction does not apply to benefits received by a surviving spouse. Report on Schedule ADJ, Line 6, Code 44. *Code of Virginia*, §58.1-322[C][26].

Source: Virginia Department of Taxation website: http://www.tax.state.va.us/it_subtractions.htm

GLOSSARY

ADJUSTED GROSS INCOME (AGI). Income after adjustments to remove certain categories of income such as individual retirement account (IRA) contributions, self-employed health insurance deduction, and alimony paid.

AGI. See **ADJUSTED GROSS INCOME**.

BRACKET CREEP. An increase in effective tax rates caused by the failure to adjust tax brackets for inflation.

CLI. See **CREDIT FOR LOW-INCOME INDIVIDUALS**.

CONFORMITY. A measure of how closely a state's tax code comes to the federal tax code. In this study, substantial conformity exists if the state starts from federal taxable income, moderate conformity exists if the state starting point is federal adjusted gross income. A state that defines its income tax base without reference to the federal code is said not to conform to the federal base definition.

CONSUMER PRICE INDEX (CPI). The Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W) is a cost-of-living index published monthly by the U.S. Department of Labor's Bureau of Labor Statistics.

CPI. See **CONSUMER PRICE INDEX**.

CREDIT. A direct subtraction from tax calculated by application of the **STATUTORY TAX RATES** to the **STATUTORY TAX BASE**. A refundable credit results in a refund if the credit exceeds tax liability before the credit.

CREDIT FOR LOW-INCOME INDIVIDUALS (CLI). A nonrefundable low-income Virginia tax **CREDIT** that has the effect of raising the tax threshold (below which no tax is owed) for families eligible for the credit. Virginia's credit is not considered to be an **EARNED-INCOME TAX CREDIT**.

EARNED-INCOME TAX CREDIT. The earned-income tax credit (EITC) is subtracted from whatever income tax liability there may be. For example, if a taxpayer has \$3,500 federal income tax liability before the EITC, and is entitled to an EITC of \$3,000, the net tax liability is reduced to \$500. What sets the EITC apart from most other tax credits, however, is that it is refundable in the case of the federal tax and several state taxes, as already noted.

EFFECTIVE TAX RATE. **TAX LIABILITY** as a percentage of a broad measure of income, such as personal income or **ADJUSTED GROSS INCOME**. **EFFECTIVE RATES** generally differ from **NOMINAL TAX RATES** because the **STATUTORY TAX BASE** is smaller than the broad income measure, and/or because **GRADUATED RATES** apply only to higher income levels.

EITC. See **EARNED-INCOME TAX CREDIT**.

GRADUATED RATE STRUCTURE. Tax rate structure in which the nominal marginal tax rate rises with income. Note that this is not synonymous with a **PROGRESSIVE TAX**.

HORIZONTAL EQUITY. A principle of taxation stating that people with equal income should pay equal taxes.

INCOME ELASTICITY. Income elasticity is the ratio of the percentage change in tax divided by the percentage change in income.

INDEXING. The use of a computed price index to scale tax brackets, exemptions, standard deductions, and credits to change with inflation.

INFLATION TAX. A phenomenon that occurs when tax brackets, exemptions, standard deductions, and credits are not indexed to inflation and workers receive only cost-of-living pay increases, thus having their incomes pushed up through the tax brackets with the result that the effective tax rate increases.

ITEMIZED DEDUCTIONS. Permissible deductions that are itemized by the taxpayer. Although all taxpayers are entitled to a standard deduction of a specified amount, some taxpayers may be able to increase this tax deductible amount by itemizing their expenses.

NEUTRALITY. See **TAX NEUTRALITY, REVENUE NEUTRALITY**

NOMINAL TAX RATE. See **STATUTORY TAX RATE.**

NOTCH EFFECT. A notch effect is a greater than one dollar increase in tax liability resulting from a one dollar increase in income. One instance of such an effect is the abrupt withdrawal of the \$300 Virginia CREDIT FOR LOW-INCOME INDIVIDUALS when income rises above the poverty line. Notch effects are implied by the complaint, "I got just enough of a raise to put me into a higher tax bracket," but this common complaint betrays a lack of understanding of how graduated-rate structures work.

PERSONAL EXEMPTION. An amount for the taxpayer and his or her dependents that is subtracted from ADJUSTED GROSS INCOME in arriving at TAXABLE INCOME. The exemption amount is multiplied by the number of dependents plus the taxpayer and in essence, it is income taxed at a rate of zero.

POVERTY THRESHOLD. An amount computed such that a person or family earning less than that amount is considered to be poor. Changes in poverty thresholds estimated by the U.S. Census Bureau are not proportionate to the change in family size.

PROGRESSIVE RATE STRUCTURE. See **GRADUATED RATE STRUCTURE.**

PROGRESSIVE TAX. A tax characterized by effective tax rates that rise as income rises. Note that a graduated structure of nominal rates is not essential to achieving progressivity, which also is provided by a single tax rate coupled with a tax-free amount.

REFUNDABLE CREDIT. A tax credit that has the potential to reduce tax liability below zero for eligible taxpayers. For example, if the tax credit were \$3,000 and a hypothetical taxpayer had a tax liability of \$500, the refundable credit would result in a \$2,500 payment to the taxpayer.

REVENUE NEUTRALITY. An analysis technique that maintains a specified tax yield when alternative provisions are applied to the information for that year. This technique shows changes in relative tax burdens among taxpayers.

SIMPLICITY. A criterion for taxation concerned with how easily the government can administer and the public can comply with the tax.

STANDARD DEDUCTION. A fixed amount in lieu of itemized expenditures representing nontaxable expenditures available to all taxpayers that is subtracted from ADJUSTED GROSS INCOME in arriving at TAXABLE INCOME. In Virginia, the standard deduction is \$3,000 for an individual return and \$5,000 for a married return. Taxpayers who claim the standard deduction are not permitted to itemize expenditures and those who claim the standard deduction on their federal return must also claim the standard deduction on their Virginia tax return. The itemized or standard deduction is in essence, income taxed at a rate of zero.

STATUTORY TAX BASE. See **TAXABLE INCOME.**

STATUTORY TAX RATE. Tax rate(s) specified by statute for application to the statutory tax base, i.e., to TAXABLE INCOME in the case of the income tax

TAX CREDIT. An amount to be subtracted from the tax amount given by the product of the STATUTORY TAX RATE(S) and the STATUTORY TAX BASE. By contrast, deductions and exemptions in that these are subtractions that reduce the statutory tax base, whereas credits are subtractions from the calculated tax amount.

TAX-FREE AMOUNT. The amount of income removed from the tax base through personal exemptions and standard deductions.

TAX SURCHARGE. An additional tax amount determined as a percentage of calculated tax liability. For example, if applying STATUTORY TAX RATES to the STATUTORY TAX BASE resulted in a \$500 tax liability, a 10 percent tax surcharge would increase liability to \$550.

TAXABLE INCOME (TI). Adjusted gross income less the sum of personal exemptions and deductions (taxpayers may choose to use the standard deduction or to itemize deductions, although this choice for the Virginia tax must be the same as for the federal tax).

TAX LIABILITY. The amount of tax owed, equal to the product of the statutory tax base (**TAXABLE INCOME**) time the statutory tax rate(s), less and credits.

TI. See **TAXABLE INCOME**.

TAX THRESHOLD. An amount of income below which no tax is owed. See also **TAX-FREE AMOUNT** and **tax ZERO BRACKET AMOUNT**.

TAX NEUTRALITY. Tax neutrality describes a tax structure that minimizes economic behavior to avoid or reduce the tax.

VERTICAL EQUITY. A principle of taxation concerned with the relative tax burdens of those with differing ability to pay.

ZERO BRACKET AMOUNT. See **TAX-FREE AMOUNT** and **TAX THRESHOLD**.

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